

Assessment of the Oil and Gas Industry Workforce



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Executive Summary

Introduction

Rapid expansion in the oil and gas industry has led to unprecedented growth in western North Dakota. That growth has created thousands of new jobs which has fueled population growth as well as housing shortages and inflated housing costs. Rapid growth has outpaced existing infrastructure and communities have struggled to keep pace with demand for services while at the same time trying to plan for future delivery of public services. The unique nature of the oil and gas industry and the associated workforce has complicated both the delivery of services and infrastructure and efforts to plan for the future.

The oil and gas industry workforce consists of both resident and non-resident workers. The substantial non-local workforce is a function of the nature of the work, workforce characteristics, and industry practice. For example, the workforce associated with oil field development activities such as drilling, hydraulic fracturing (fracing), construction and gathering systems construction (e.g., pipelines) and other specialized construction (e.g., refining and processing construction) often consist of workers who do not reside in North Dakota. For those workers, employment is often characterized by alternating working and non-working periods and during non-working periods, workers return to their residence which may be elsewhere in North Dakota or out of state.

Even though some workers are not considered “residents” as defined by the U.S. Census Bureau they still require public and private goods and services, such as housing, access to health care, police and fire protection, access to schools, and retail and entertainment options and may require a different mix of good and services. An understanding of the size and characteristics of this non-resident population is critical for public policy makers, economic developers, business owners and investors as they plan for and make decisions regarding the delivery of current and future public and private goods and services.

Insights on the magnitude of oil field development and population expectations are critical to efforts to address short-term needs and to properly allocate resources and plan for long-term development. Prior to the rapid decline in oil prices in early 2015, the general understanding was that elevated levels of oil field development would likely continue for over a decade. With the substantial drop in oil prices, expectations for the level of development activity have moderated. However, the state has a proven reserve with the potential for a substantial number of wells and while drilling activity has declined substantially it has not stopped. Low prices have prevented many wells from being developed and the industry has proven to be very responsive to price. Over the next few decades the industry could potentially experience several periods of rapid development and reduction in development activity depending on market conditions. Regardless

of the rate of development, the petroleum industry is considerably larger than historical levels with the potential for substantial growth in the future. A study of workforce characteristics is needed to assess potential future changes in population and plan for future demand for infrastructure, housing and other public and private goods and services.

While several studies have estimated the service population in selected geographic areas and jurisdictions within the Williston Basin, no studies have been completed that aim to better understand the characteristics, motivations, perceptions or intentions of either the resident or non-resident workforce. This study aims to provide insight into the motivations, characteristics and intentions of the oil and gas industry workforce.

Objectives

Study objectives were to make a comprehensive assessment of the characteristics of the current and expected oil and gas industry workforce in the Williston Basin. The study aimed to describe the current workforce in terms of residency, job description, and industry activity. The study also examined demographic characteristics, workforce perceptions and intentions and examine issues related to housing.

Results

Key findings and conclusions from stakeholder interviews, the workforce survey and focus groups are summarized below.

Stakeholder Interviews

Stakeholder interviews conducted in 2014 were instrumental in identifying key workforce issues. Insights gleaned from the interview process were used to guide development of the workforce survey questionnaire. Because of the dramatic change in market conditions in late 2014 and early 2015, additional interviews were conducted in 2015.

Issues related to housing cost, workforce shortages, inability to recruit and retain qualified workers, employee poaching and high turnover rates were identified as critical issues across all economic sectors in 2014. The cost of housing was cited as an impediment to attracting and retaining a qualified workforce, especially in public and secondary business and services.

Despite the very different market conditions as a result of the rapid decline in crude oil prices in early 2015, many of the workforce issues identified in 2014 remained key considerations in 2015. Housing costs were still cited as an issue by stakeholders. Housing allowances and subsidies for both oil and gas industry workers and public service providers were still prevalent

and were reported to be necessary to attract and retain personnel. While labor markets had improved and workforce turnover had stabilized; some industry segments still struggled with high turnover and workers for some skilled labor positions were still in short supply. Housing assistance for personnel in the public sector (e.g., teachers and law enforcement) was still widespread.

The dramatic drop in crude oil prices in early 2015 resulted in a very different economic environment compared to 2014. The substantial drop in oil prices replaced a boom type mentality with one that was focused on cutting cost and improving efficiencies. Cost cutting measures such a reduction in hours, overtime hours and other perks and benefits were reported by all industry stakeholders. While there were substantial layoffs in many industry segments, stakeholders indicated there was also substantial voluntary attrition as a result of cost cutting measures such as a reduction in hours and overtime hours. Many stakeholders suggested that many of the lost jobs were held by workers that did not live in North Dakota and they simply returned to their home state when employment conditions changed. Workforce housing benefits were still widespread. While firms made adjustments to workforce housing perks in an effort to reduce costs, stakeholders indicated that housing subsidies were still necessary to attract and retain workforce.

To what degree workforce issues that were identified in 2014 and 2015 will remain or change will depend on future market conditions. A continued slowdown may put downward pressure on housing prices and employers may continue to see a more stable workforce. A near term price recovery could lead to a ramp up of activity which could mean continued high housing costs and a return to a more competitive environment for personnel.

Focus Groups

Focus groups were conducted in 4 communities in western North Dakota. Focus group findings represent a range of perspectives on the strengths, weaknesses, opportunities and challenges present in western North Dakota. Responses are not intended to be representative of, nor generalizable to, the larger population. Rather the purpose and value of qualitative efforts like focus groups is to provide insights into community's strengths, weaknesses, successes and areas that need improvement.

A common theme from all the focus groups was that participants like the small town feel and sense of community. Respondents in all groups also had very positive things to say about the schools in their respective communities. Some participants commented how communities were very welcoming while others had the opposite experience and commented that they feel like outsiders and not made to feel welcome.

The high cost of housing and cost of living was another common theme. While some commented on the lack of housing, most participants agree that the availability of housing had improved, but was still extremely expensive, especially for those that work in secondary or public service sectors. The lack of quality of life amenities such as retail, entertainment and recreation options were also frequently cited as community shortcomings. Participants also cited there were few entertainment and recreation opportunities for youth other than school sports activities.

Quality of life amenities, retail, entertainment and recreation opportunities were frequently cited as things their community needs. The need for improved public services including additional law enforcement, professional emergency service responders, and social services programming was also frequently cited as services their communities were currently lacking.

Examples of what communities were doing well also varied considerably. Improved presence of law enforcement, improvements in social and public services, infrastructure expansion, youth recreation opportunities were cited as examples. Generally speaking, respondents agreed that while there were still many needs their communities have been working hard to address those needs and some of those efforts were starting to become more visible.

While communities still faced challenges, participants identified several areas where their community has taken steps to address those challenges. The addition of law enforcement officers, subsidized housing for public service employees and the addition of new facilities like a recreation center were cited as examples of steps taken to address challenges.

Focus groups were used to identify issues and gain insight into the perceptions of individuals who have recently moved to North Dakota. While some themes, such as cost of housing and lack of quality of life amenities and the need for expanded public and private goods and services were identified at each of the focus groups, other issues varied depending on the community. While the community response to the challenges associated with oil and gas industry growth varied, participants identified positive things in each community that have been done or are underway to address challenges associated with rapid growth in the oil and gas industry.

Workforce Survey

Sixteen oil and gas industry firms participated in the data collection. The sixteen firms had a total of 4,986 employees and 1,297 contract employees for a total of 8,113 workers. Survey distribution consisted of participating firms sending an email to their employees requesting they participate in a North Dakota State University study with a link to an online questionnaire. Ultimately, 1,672 observations (completed questionnaires) were collected. Data were analyzed

using widely accepted qualitative analysis which provided descriptive statistics based on various stratifications.

There were clear distinctions between respondents that live in North Dakota and those that do not live in North Dakota. The non-resident workforce more frequently performed industry activities related to ‘development activities’ and job descriptions related to ‘field operations’. Non-resident workers have longer work periods ‘on’ followed by longer work periods ‘off’ and work longer shifts. Respondents that live elsewhere most frequently resided in some type of temporary, non-traditional housing while working in North Dakota, and frequently lived with co-workers or roommates.

A majority of respondents that live elsewhere do not want move to North Dakota. Personal considerations such as not wanting to move away from friends and family were most frequently cited as having considerable or total influence on their decision to not move to North Dakota. In contrast, respondents that want to move to North Dakota most frequently cited housing costs and price risk as the factors that influenced their ability to move to North Dakota.

Job descriptions of respondents that live in North Dakota were about equally divided between ‘development activities’ and ‘production/operations’ activities. Respondents that live in North Dakota most frequently live in a single family home they own. While respondents that live in North Dakota were generally satisfied with the type and condition of their owned or rented housing, they were more frequently unsatisfied with the cost of their housing.

The distinct differences between respondents that live in North Dakota and respondents that live elsewhere have significant implications for the delivery of public and private goods and services. The non-resident workforce largely uses some form of temporary housing and a majority of non-resident workers have no intention of moving to North Dakota. They will likely use a different mix of goods and services and have different expenditure patterns than the resident workforce.

It is possible that there will be some level of demand over the long term for some type of non-traditional housing to accommodate the non-resident oil and gas workforce. The type of housing demanded and living arrangements, for both the resident and non-resident workforce have significant implications for planning for the appropriate mix of housing and other public and private goods and services.

The large percentage of non-resident workforce related to ‘development activities’ also has substantial implications. Development activity has slowed considerably as a result of current economic conditions. However, if and when prices rebound and drilling and other development activities increase, the region could experience a substantial increase in non-resident workforce.

While most non-resident workers do not want to move to North Dakota, a substantial portion of non-resident workers in the Williston Basin would like to move to the state and become

residents. Housing cost and price risk were cited as the factors that most influenced their ability to move to North Dakota. Policies and programs can be developed to address affordability issues or housing prices may moderate making it easier for those worker that want to move to North Dakota to do so. Other impediments that would be beyond the ability of the state to change, e.g., the weather, or factors that are difficult to change, such as inaccurate perceptions about the state, did not weigh heavily on respondent's decision to relocate.

Implications

There are two distinct workforces in the oil and gas industry with different characteristics. They have different work schedules and employment characteristics and they use different types of housing. It is possible there will be a non-resident commuting workforce in the state over the long term. Further, the non-resident workforce is concentrated in jobs related oil and gas industry development activities which could suggest surges of non-resident workers that correlate with development activities that are driven by market conditions. All of these considerations have implications for the planning and delivery of current and future public and private goods and services. The potential for a long term presence of a non-resident workforce represents a substantial change from the historic characteristics of the workforce in North Dakota.

Assessment of the Oil and Gas Industry Workforce

Nancy M. Hodur and Dean A. Bangsund¹

Introduction

Rapid expansion in the oil and gas industry has led to unprecedented growth in western North Dakota. Growth has created thousands of new jobs which has fueled population growth as well as housing shortages and inflated housing costs. Rapid growth has outpaced existing infrastructure and communities have struggled to keep pace with demand for services while at the same time trying to plan for future delivery of public services. The unique nature of the oil and gas industry and the associated workforce has complicated both the delivery of services and infrastructure and efforts to plan for the future.

The oil and gas industry workforce consists of both resident and non-resident workers. The substantial non-local workforce is a function of the nature of the work, workforce characteristics, and industry practice. For example, the workforce associated with oil field development activities such as drilling, hydraulic fracturing (fracing), construction and gathering systems construction (e.g., pipelines) and other specialized construction (e.g., refining and processing construction) often consist of workers who do not reside in North Dakota. For those workers, employment is often characterized by alternating working and non-working periods and during non-working periods workers return to their residence which may be elsewhere in North Dakota or out of state. Other workers associated with oilfield development may only temporarily make their residence in North Dakota. The workforce related to pipeline or processing facilities construction provides a good example. When their job on the pipeline or processing facility is complete, the worker moves to the next job site.

Other jobs in the oil and gas industry may be characterized by high turnover. Various factors may contribute to high turnover rates. Some industry activities like truck transportation typically have high turnover rates. Long hours and difficult work conditions may also contribute to high turnover. Workers may work for a short period of time under intense conditions, quickly burn out and are replaced by other similar workers. This may be especially true in low skill positions. The difficulty of commuting long distances and long alternating working and non-working periods may also contribute to turnover.

Non-resident workers and workers who reside in North Dakota only while working in North Dakota are not included in the decennial census or in population estimates provided by the U.S. Census Bureau. The U.S. Census Bureau reports resident population only and does not count

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workers and others present in the state that are residents of other states. Lack of available housing and cost of housing may also contribute to the large non-resident workforce in North Dakota. Even though some workers are not considered “residents” as defined by the U.S. Census Bureau they still require public and private goods and services, such as housing, access to health care, police and fire protection, and retail and entertainment options. An understanding of the size and characteristics of this non-resident population is critical for public policy makers, economic developers, businesses and investors as they plan for and make decisions regarding the delivery of current and future public and private goods and services.

Because of the shortcomings of U.S. Census Bureau estimates, an alternative definition of population that includes the substantial non-resident population was needed. The term “service population” was coined and is defined as the sum of the resident population and others who work or reside in a given geographic area but do not meet the residency criteria as defined by the U.S. Census Bureau. This includes non-resident workers that maintain residency elsewhere or others who reside in the area temporarily.

Insights on the magnitude of oil field development and population expectations are critical to efforts to address short-term needs and to properly allocate resources and plan for long-term development. Recent work by state agencies, planners, and researchers has produced a better understanding of the potential rate and extent of oil field development, however there is still much uncertainty.

Prior to the rapid decline in oil prices in early 2015, the general understanding was that elevated levels of oil field development would likely continue for over a decade. With the substantial drop in oil prices, expectations for the level of development activity have moderated. However, the state has a proven reserve with the potential for a substantial number of wells and while drilling activity has declined substantially it has not stopped. Low prices have prevented many wells from being developed and the industry has proven to be very responsive to price. Over the next few decades the industry could potentially experience several periods of rapid development and reduction in development activity depending on market conditions. Regardless of the rate of development, the petroleum industry is considerably larger than historical levels with the potential for substantial growth in the future.

Projections of future population and associated infrastructure requirements continue to be made without representative data on the demographic makeup of the current or expected future workforce in the Williston Basin. Lack of data on the current workforce has hindered efforts to accurately measure existing population and limits the ability to describe and predict the composition of future populations, which in turn affects the ability to plan for delivery of private (e.g., retail and commercial goods and services) and public services (e.g., police and fire

protection, day care, recreation school systems) and private and public infrastructure (e.g., quantity and composition of housing, water systems, K-12 classroom space, etc.).

Under rapid growth conditions the expectation was that the oil and gas industry workforce would transition over time from one heavily weighted by drilling, fracking, and construction-related jobs to a workforce associated with production, operations, well servicing, infrastructure maintenance, oil and gas shipment, and processing activities. However, given the industry's response to recent price declines this transition is likely not to be as linear and predictable as previously expected. Rather the state may experience several periods of high levels of development activity depending on market conditions. This situation creates several problems:

- (1) The temporary workforce in North Dakota could vary substantially in the next decade depending on the level of development activities in the state.
- (2) Ultimately the temporary workforce will likely leave the state and follow employment opportunities elsewhere.
- (3) The state has little understanding of what to expect from the future permanent workforce, which is expected to have different characteristics and needs than the current workforce.

All of the above complicate efforts to plan at the local and state level. A study of workforce characteristics is needed to assess potential future changes in population and plan for future demand for infrastructure, housing and other public and private goods and services.

While several studies have estimated the service population in selected geographic areas and jurisdictions within the Williston Basin, no studies have been completed that aim to better understand the characteristics, motivations, perceptions or intentions of either the resident or non-resident workforce. Critical to efforts to address demand for current and planning for delivery of future goods and services is an understanding of future demand. This study will provide insights into the current workforce in the Williston Basin which can aid in estimating housing demand and projecting potential future population. Further, the lack of understanding of the composition and characteristics of current and future workforce complicates planning efforts to address socio-economic impacts of the rapid expansion of the oil and gas industry. This includes planning for demand for infrastructure, type and quantity of housing, day care, education, health care, and recreation services. This study aims to provide insight into the motivations, characteristics and intentions of the oil and gas industry workforce.

Objectives

Study objectives were to make a comprehensive assessment of the characteristics of the current and expected oil and gas industry workforce in the Williston Basin. The study aims to describe the current workforce in terms of residency, job description, and industry activity. The study will also examine demographic characteristics, workforce perceptions and intentions and examine issues related to housing.

Methodology

The study entailed a comprehensive primary data collection effort to elicit demographic and other pertinent information from workers in the oil and gas industry and new residents. Data collection consisted of personal interviews with community, business and industry representatives, an online survey of workers in the oil and gas industry and focus groups with new residents.

Stakeholder Interviews, 2014

The study team collaborated with private and public stakeholders including representatives of the petroleum industry, state government agencies, business and community leaders, and non-governmental organizations to identify individuals for personal interviews. Personal interviews were conducted with business and industry representatives, state and local leaders, decision makers and others familiar with oil and gas industry in both the summer of 2014 and 2015. In 2014, 46 personal interviews were conducted. The goal of the interviews in 2014 was to gain an understanding of the size and makeup of various industry components, offer insight into characteristics of the oil and gas industry workforce and to guide the development of the online survey instrument. Input from public and private stakeholders was also used to develop the methodology for conducting the workforce survey.

A second round of personal interviews in the summer of 2015 was added to the original study methodology because of the industry slowdown in early 2015. The rationale for revisiting the personal interviews was to attempt to assess if and to what degree the key issues identified in 2014 had changed or remained the same. Twenty-two personal interviews were completed in June, July and August 2015. Without revisiting the personal interviews, findings and insights gleaned from the 2014 interviews could potentially be viewed as irrelevant in light of the industry slowdown that took place in early 2015.

Oil and Gas Industry Workforce Survey

The initial plan was to conduct a mail survey, but the use of a mail survey was abandoned when it became clear that developing a mailing list would be highly problematic. There was no effective way to develop a mailing list that would include the substantial number of workers that did not have a North Dakota mailing address or were residing in various types of workforce accommodations, e.g., hotels, employer provided housing, crew camps, RVs, etc. Further, a paper questionnaire attempting to sort out key issues would have resulted in a lengthy and complicated survey instrument. Intercept surveys at various high traffic locations, distribution of surveys at firms' safety meetings, and the use of social media were all considered as substitutes for a mail survey.

The use of intercept surveys was abandoned due to difficulty in effectively targeting oil and gas industry workers. For example, a high volume retail outlet like Walmart may offer a substantial amount of foot traffic; however it is unlikely that most of the patrons would fit the survey criteria. The use of intercept surveys at truck washes was slated to take place in the spring of 2015, but due to the industry slowdown (truck volumes were down substantially from the previous summer and truck washes were down as a cost cutting mechanism) and the need to revisit personal interviews in 2015, intercept surveys at truck washes were not conducted. Intercept surveys at company meetings (e.g., safety meetings) were also considered however, it was determined that the use of a paper survey that would allow quick and easy responses would not provide adequate information and a complicated survey instrument would result in poor response rates in addition to being a substantial interruption to business activities. While several firms expressed interest in cooperating with allowing access to workers during company meetings, other firms did not believe this would be effective or were unwilling to allow access during company meetings. The use of social media was also considered, however that approach was abandoned due to the lack of control in the distribution of the survey instrument.

As result of interviews and input from industry representatives, community leaders and other stakeholders, the consensus was that the best way to reach the oil and gas industry workforce was to enlist the participation of oil and gas industry firms to reach the workforce via email and an online questionnaire.

The oil and gas industry was divided into several broad categories of activities with input from stakeholders collected during personal interviews. The activity categories were structured to segment the industry into a few major categories that would represent a cross section of industry activities.

Oil and gas industry activities were divided into the following six segments:

- Production and operations, including well maintenance and transportation

- Fracing and well completion services
- Drilling, well site preparations, geophysical services
- Rail and pipeline operations, gas and oil shipments
- Infrastructure construction such as roads, pipelines, municipal services, and rail
- Natural gas processing

Firms that provide one or more of the various industry categories were contacted and asked to participate in the research effort by assisting the research team in reaching out to their employees. A sample of employees that work in jobs related to various industry activities was critical because employee characteristics likely vary by industry segment and job description. Several methods were used to identify and contact firms from each of the six industry categories to encourage participation in the study effort. The study team made a presentation at the 2014 Williston Basin Petroleum Conference soliciting firm participation. The study team enlisted the help of various local and community leaders for introductions to key decision makers. The North Dakota Petroleum Council helped to identify and contact various firms to enlist participation.

Survey distribution consisted of participating firms sending an email to their employees requesting they participate in a North Dakota State University study with a link to an online questionnaire. A second email request for participations was made approximately one week to 10 days after the first request.

By early January 2015, approximately 650 responses had been collected with several firms that had committed to participating but had not yet distributed emails to their employees with the link to the questionnaire. Several other firms had also been identified as potential participants. The process of reaching the workforce through company correspondence changed dramatically as the industry responded to the effects of the significant and rapid price declines in late 2014 and early 2015. Essentially the process stopped completely. One industry representative later said, “It was not a good time to be requesting employees complete a questionnaire”. Data collection efforts were stalled several months. By early summer, industry conditions had stabilized and efforts and communication with participating oil and gas industry firms resumed. Ultimately, 1,668 observations (completed questionnaires) were collected from 15 firms representing 8,113 employees. Data were analyzed using widely accepted qualitative analysis which provided descriptive statistics based on various stratifications.

Recoded Responses

The first question asked participants what best described their job using 8 predefined job categories and an ‘other’ choice. A substantial number of participants choose the ‘other’ option and then provided a brief description of their job. Upon review of the ‘other’ responses, most fit into one of the eight predefined job descriptions. The ‘other’ responses for job description were

recoded into one of the eight predefined job descriptions. The recoding was done with the input of industry experts familiar with oil field job descriptions and activities. Most of the ‘other’ responses were recoded as ‘field operations support’, ‘professional services’ and ‘field operations, 2 or more years’ experience’. The length of time respondents had been in their current job was used to recode positions that were delineated by years of experience (e.g., ‘field operations less than 2 years of experience’). Recoded workforce job descriptions are detailed in Table 1.

Table 1. Recoding Workforce Job Description for ‘Other’, Employee Questionnaire, 2015	
	-----number-----
Field operations, less than 2 years of experience	0
Field operations, 2 or more years of experience (Pipeline compliance, locators/location services, field supervisor, wireline, material handler/material loader, gas plant operator/control room operation, wireline, automation foreman, electronics/instrumentation technician, down hole operations, hydraulic fracturing, industrial controls, midstream operations, supervisor well site construction, midstream operations, field supervisor, industrial controls)	22
Infrastructure construction such as roads, pipelines, municipal services, rail	0
Trucking, transportation (dispatch, oil movement scheduling, oil movement transportation, fluid services logistics)	6
Professional services, such as engineering, accounting, management, geology (Public relations and retention specialist, IT/technical support, field engineer, supply chain specialist, sales/field sales, cost control, purchasing, regulatory compliance, land man)	25
Office, clerical or administrative support staff (office services)	1
Field operations support such as mechanic, equipment maintenance (health, safety and environmental services, warehouse, facility maintenance, manage tools, mechanic, inventory management, field operations support/supply, laboratory/lab technician, instructor/training, scheduling, electronic foreman, hazardous waste, security, crew transportation)	53
Residential or commercial building construction	0
(n)	(107)

Participating Firm Questionnaire

Participating firms were also asked to complete a brief questionnaire. The purpose for surveying participating firms was to determine if a representative sample of the workforce was obtained. The participating firm questionnaire would enable a comparison of the distribution of employee respondents by job description and residency and the firm's actual distribution of employees by job description and residency. Firm representatives were asked a series of questions such as what oil field activities and services their firm provided, the number of employees, employee residency, etc. Information from the participating firms enabled a comparison of the sample (employees that completed the questionnaire) to the actual population. Knowing to what degree the sample is consistent with population characteristics is necessary to generalize findings to the larger population of the oil and gas industry workforce.

Focus Groups

Four focus groups meetings were conducted with new residents in a cross section of communities. The NDSU Extension Service Center for Community Vitality and local extension agents played a critical role in enlisting new resident participation in the focus group interviews. Eight focus group meetings were initially planned, however that number was reduced to accommodate additional personal interviews in the summer of 2015 in response to the dramatic change in market conditions.

Meetings were held in Watford City, Killdeer, Dickinson and Ray. Focus groups were used to identify issues and gain insight into new residents' perspectives and perceptions of their community and the state. Participants were asked to share their perspectives on their community's strengths and shortcomings. They were also asked about what their communities had done well and not so well in response to rapid growth in their community and the region. In addition they were asked what were the biggest challenges and/or needs facing their communities and what was, or, was not being done to address those challenges and needs. Focus group findings were analyzed and grouped into common themes using accepted qualitative analysis methods.

Results

Results for stake holder interviews, workforce and participating firm survey and focus groups are detailed in the following sections.

Stakeholder Interviews, 2014

Findings from stakeholder interviews were organized into key themes of ‘affordable housing’, ‘impediments to home ownership’, ‘quality of life considerations’ ‘labor markets’, ‘turnover and poaching’, ‘workforce intentions’, ‘practices and trends in workforce shifts’, ‘employer provided housing and housing allowances’ and ‘other’. Findings are detailed below.

Affordable Housing

Affordable housing was cited as one of the most pressing workforce issues for employers. The cost of housing was cited as problematic by nearly every individual interviewed. The high cost of housing was cited as a key impediment to workers relocating to western North Dakota. One individual felt that the housing issue was so critical that people will leave and firms will move on to other plays if the housing issue is not addressed. Several participants suggested additional investment from the state is necessary to help address infrastructure issues that act as a bottleneck to development efforts.

Housing inventories had improved slightly, especially multi-family housing units, with little moderation in housing costs. Developers were reported to be willing to take longer to rent or sell properties rather than reduce prices. Some slight reductions in rental rates for older rental housing units, generally those that require renovations or lack amenities, were reported. Housing stock had not increased to the point where there was downward pressure on housing costs.

High cost of living was cited as a key consideration in recruiting qualified workers, especially for positions in public services. Many school districts supply housing at a less-than-current market rates in order to attract and retain teachers and other school district employees. Other city and county jurisdictions had acquired housing and made similar accommodations for public employees.

Lack of affordable housing was blamed for high occupancy rates such as multiple families living in single family homes and numerous workers sharing an apartment. It was suggested that some employer-provided housing had high occupancy rates and the firms were still using single family homes and apartments as crew accommodations and “stacking in as many people as possible”.

High cost of housing was cited as a motivating factor for people to rely on non-traditional housing such as RVs. The use of RVs as year-round housing was widespread throughout western North Dakota. Anecdotal stories of workers purchasing RVs that they will live in for a specified period of time and then move on were not uncommon.

Several people suggested developers paid too much for land which is a contributing factor to continued high cost of housing. Construction costs and prohibitive land use zoning and regulatory roadblocks were also cited as factors responsible for high housing costs. One respondent indicated that large lot requirements combined with high building costs make single family homes too expensive and the return on investment was not adequate to proceed. In some instances developers have requested a reduction in the minimum lot size or the ability to use manufactured housing in an attempt to cut costs and improve return on investment. Some communities have been willing to work with developers to modify zoning for increased densities, while other communities have been unwilling to adjust long standing zoning regulations.

Some respondents commented that other zoning decisions set up developments for failure. For example, approval of a residential housing development without other zoning changes to enable business and commercial development in conjunction with residential development effectively derails housing development projects in rural areas.

It was suggested that financiers view development in western North Dakota as a risky venture in the event of changing market conditions. Extra regulation in the wake of the 2009 housing crash and the sub-prime mortgage crisis were cited as impediments to housing development.

Lack of available infrastructure was cited as a key limitation to housing development. In some communities, even if developers wanted to build housing, the necessary infrastructure, (e.g., sewer, water) were not in place to support development. One city leader indicated some developers have suggested concurrent development; however that is very risky strategy because if there are no water lines, there is no fire response. Most stakeholders interviewed agreed that communities were not close to catching up with infrastructure demand.

Impediments to Home Ownership

While oil and gas industry jobs are generally high paying jobs, numerous impediments to workers' ability to secure a loan and buy a home were identified. The high cost of housing, poor credit ratings, and the length of time in a job (potential ramifications of job hopping) were cited as constraints to home ownership. It was also stated that sign-on bonuses and overtime are often not considered when applying for a mortgage, both of which can potentially make up a substantial portion of an oil and gas industry worker's wages. The inability of non-resident

workers to sell their current home was cited as a potential impediment to buying a home and relocating to North Dakota. This may be an especially relevant consideration for workers from states that were especially hard hit by the effects of the 2008 recession.

Stakeholders interviewed suggested that the right type of housing was not available. It was suggested more rental housing is needed because much of the workforce will not likely become long-term residents of the state.

Quality of Life Considerations

The lack of quality of life amenities was frequently cited as one of the most pressing issues for employers. The lack of quality of life amenities such as recreation opportunities, retail and entertainment options, youth programs, among others, was perceived as a substantial challenge to attracting and retaining a resident workforce. One person commented that the community/community leadership was *starting* to realize they must provide quality of life amenities in order to attract and retain new residents.

Several respondents indicated that family considerations were also impediments to workers relocating to North Dakota. Several respondents felt that if quality of life issues were addressed it would help to alleviate family members concerns about relocating.

One city leader commented they were just starting to see development of secondary services. Nearly all respondents commented on the need for the development of quality of life amenities and secondary businesses and services.

Some stakeholders commented that quality of life considerations vary among various segments of the workforce. For example, it was suggested that for those individuals that work long hours on shift schedules, especially non-residents, some quality of life considerations like recreation or entertainment options are of little concern. For those individuals, quality of life considerations may be different than for those with a more traditional work schedule or those that reside in North Dakota. Because of their rotational shift schedule, long hours, residential status, their needs are far more basic. For example, the ability to get a haircut or see a health care provider may be more important quality of life consideration than entertainment or recreation options.

Labor Markets

Workforce shortages and the inability to attract workers were cited as a critical issue across all sectors. The ability to secure individuals for public service positions was especially challenging. For example, a national search for an assistant city planner with a starting salary of \$60,000 failed and the labor pool for a lower level public service position was extremely limited.

Stakeholders commented that non-oil and gas industry firms, such as light manufacturing, have a difficult time competing with the oil and gas industry for qualified workforce.

High cost of living was cited as a significant consideration in recruiting and retaining workforce across all sectors, but was especially problematic for public and secondary services and other non-oil and gas industries. Service based businesses were especially hard hit despite current high wages relative to historic wages. For example, one stakeholder interviewed commented that a 17 year old was being paid \$13.50 per hour to run the deli at the local grocery store and there were 9 open positions in the deli alone. Stakeholders also expressed concern over the potential additional strain on available labor as a result of pending retirement of older workers.

Employers have used various strategies to address workforce shortages. It was reported that many companies use their employees to help recruit additional workers by encouraging their employees to reach out to friends and family. Firms were also reported to recruit underemployed individuals from oil and gas plays in the south (e.g., Mississippi, Alabama, Louisiana). Some non-oil and gas industry employers were forced to use rotational schedules and a “fly in – fly out” business model to attract and secure non-resident workers. A major retailer was flying workers from other store locations into North Dakota. An equipment dealer was also cited as employing rotational schedules for diesel mechanics.

Turnover and Poaching

Workforce turnover was frequently cited as a substantial challenge for employers in both the oil and gas industry and other sectors. Retaining good workers in the service sector was reportedly very difficult as they often quickly moved on to higher paying jobs in the oil and gas industry or related sectors. It was reported that employers in the oil and gas industry would actively recruit and poach good workers from the service sector.

Job hopping was also cited as a significant issue. Participants reported that it was not uncommon for workers to hop from employer to employer staying only as long as required to secure signing bonuses before moving on to the next job and the next signing bonus. Turnover due to signing bonuses was not limited to skilled workers. Turnover and job hopping for signing bonuses was also reported to be prevalent in semi-skilled labor positions. Signing bonuses were reported to be as much as 40 percent of regular wages or salaries. One firm reported turnover issues were worse in North Dakota than in shale oil plays in other states that were viewed as more attractive places to live.

Turnover in some cases was characteristic of the segment of the industry. Transportation was cited as an industry segment that typically has high turnover rates compared to other segments of

the oil industry. One firm with a substantial transportation component reported they were on track for a 75 percent annual turnover rate.

Exit interviews were reported to provide some insight into employee's reason for leaving. One firm reported higher wages were most often cited in employee exit interviews as the reason for leaving. However, that industry representative felt there had to be other reasons as overall the wages paid were very good. Family issues were reported to be the second most commonly cited reason for leaving during employee exit interviews.

Turnover issues were not limited to entry or low wage-level positions. A professional services firm reported recruiting and training inexperienced workers only to have them hired away for a better offer once they acquired a few skills. It was reported that it was not uncommon for management personnel to move to North Dakota, spend the minimum required period of time necessary for advancement and then promptly or as soon as possible leave the area.

Worker burnout was cited as a contributing factor to high turnover rates and impacted workforce retention. The combination of long hours and demanding rotational schedules for some workers ultimately becomes unsustainable.

Workforce Intentions

Several stakeholders cited the prevalence of workers that have no intentions of remaining in North Dakota long term. They believe that a substantial portion of the workforce will never live here, and to some extent western North Dakota will be an outpost for a transient workforce. One community leader estimated that only 30 percent of the oil and gas industry workforce wants to move to North Dakota and stay here. There were multiple anecdotal reports of workers that have no intention of moving to North Dakota under any circumstances. One industry representative reported the desire to promote several employees, but could not, because promotion is contingent upon relocation to North Dakota.

Several stakeholders thought many oil and gas industry workers would move to North Dakota if affordable housing was available. Stakeholders interviewed commented that many workers arrive without a job and the decision to stay in North Dakota or return to their home state is often made after an 18 to 24 month trial period. One respondent commented that 70 percent of the people coming to Williston arrive without a job. Another respondent felt that if a worker stayed past the first year and started closing in on the second year, they were more likely to stay in North Dakota long term.

Practices and Trends in Workforce Shifts

Most stakeholders interviewed agreed that the typical business model for oil and gas industry development activities involves a rotation schedule that consists of extended periods of working and non-working periods, e.g., 2 weeks on, 1 week off. While that type of schedule was not universal, stakeholders interviewed felt that the prevalence of rotational schedules was a combination of industry practice and one of necessity in order to attract workers. It was suggested oil and gas industry employers prefer rotational shift schedules, and the nature of the activity lends itself to shift schedules that consist of long hours for multiple days or weeks and at the end of the work period the workforce is replaced by another crew. Drilling and pre-drilling activities, fracing and work over rig activities were cited as activities where the work schedules were predominately characterized by the ‘fly in – fly out’ model of working two weeks on and two weeks off or some variation thereof.

This pattern of extended periods of time ‘on’ followed by time ‘off’ or ‘fly in – fly out’ was not limited to drilling activities. Trucking and service activities were also reported to use rotational shifts. Some stakeholders interviewed indicated that some employers would prefer to move away from rotational schedules. However, it was also frequently stated that rotational shift schedules were necessary in order to attract and accommodate workers, especially non-resident workers.

Alternately, stakeholders indicated operations, maintenance and well servicing activities were more typically staffed by a resident workforce. It was reported an oil operator was having difficulty hiring ‘pumpers’ and was forced to utilize a rotational schedule for well operations which was not working well. ‘Pumpers’ operate pumps and other equipment on producing wells. Those positions have historically been held by resident workers. Some employers in business sectors that do not typically use that type of work schedule have adapted the ‘fly in – fly out’ model in order to cope with local workforce shortages.

Local trucking and transportation was another segment of the industry that according to stakeholders interviewed has historically been comprised of a local workforce. However, industry representatives from firms with substantial transportation segments indicated that most of their drivers were non-local and worked on a rotational basis. Schedules varied considerably, but one example given was 3 weeks of 5 days on and one day off, followed by 10 days off. The prevalence of the commuting workforce pattern was reported to be especially apparent on airplanes. One person suggested reliable air service was critical to retaining the large commuting workforce in the state.

Industry representatives interviewed indicated if they could get their employees to move and live in North Dakota it would help reduce turnover. The ‘fly in - fly out’ model was reported to be

very expensive and create other issues related to workforce scheduling. One individual predicted more seasonality, especially for fracing activities.

Employer Provided Housing and Housing Allowances

Housing allowances or employer provided housing was not uncommon, and in fact, prevalent in the oil and gas industry. A representative of one firm reported spending \$300 to \$1,500 per month per worker on subsidized housing. A representative of another firm reported owning over 100 housing units in addition to contracting with commercial crew camps. While providing housing has been necessary to attract workers, several industry representatives indicated they would very much like to get out of the housing business due to the high costs associated with providing housing for their workforce.

Several respondents said they believed there will always be a need for at least some level of temporary housing/workforce accommodations and some segments of the industry such as drilling operations will likely always provide onsite housing. It was their opinion there will be a substantial portion of the workforce that will remain nomadic for the duration of the play. Several participants indicated they believed there will always be some demand for temporary workforce accommodations.

Industry representatives indicated they would prefer their personnel relocate to North Dakota and they believed if they could get their employees to live in North Dakota it would help reduce turnover. Stakeholders interviewed largely agreed that a resident workforce is a more stable workforce than a non-resident commuting workforce.

Concern was expressed about the effects of dislocating workers that are currently utilizing temporary housing. Non-renewal of conditional and special use permits could cause substantial disruptions by dramatically curtailing availability of non-traditional housing units.

The use of hotels as workforce accommodations was moderating and was not as prevalent as in recent years when securing a hotel room was nearly impossible. In recent years hotels were largely functioning as crew camps.

Other

Stakeholders commented on the lack of available social services. One participant expressed concerns over health care delivery and delivery of emergency services. Another respondent cited the need for services for the homeless.

Other stakeholders commented on the significant growth in school enrollment numbers, especially in elementary school and the increase in congregation numbers at local churches. In some communities it was noted the churches were offering various activities, like bible study for men and activities for children in order to reach new residents and give them some connection to place and community.

One stakeholder interviewed commented on the social effects of the rapid expansion of the oil and gas industry and the associated in-migration of workers and their families. “The community is really made up of two worlds, the locals and the newcomers. There is definitely a separation.”

Workforce Safety and Insurance representatives commented that just a few years ago, 23 percent of workforce insurance premiums came from out-of-state firms; in 2014, 50 percent of premiums come from out-of-state-firms.

Key Findings, Stakeholder Interviews, 2014

Issues related to housing dominated the discussion with stakeholders interviewed in 2014. Lack of affordable housing impacted employers’ ability to attract workers and had forced many oil and gas industry firms into either providing housing or a housing allowance or subsidy. Housing allowances or employer provided housing was prevalent in the oil and gas industry. Housing costs were especially problematic for non-oil and gas industry workforce. Many local government units and other public service providers, (e.g., school districts) were reported to provide or help with housing in order to attract employees to provide essential public services.

The high cost of housing was also cited a motivating factor for people to rely on non-traditional housing such as RV’s or other types of mobile or temporary housing. Housing costs were also blamed for reports of high occupancy rates in single family homes and apartments. Sharing living space was reported as one strategy used to cope with housing costs.

Housing inventories were reported to have improved slightly; however little moderation in housing costs was reported. Housing issues identified by the stakeholders interviewed were consistent with conditions in the recent past suggesting that even though much housing and infrastructure had been added by the summer of 2014, demand still out paced supply for housing.

Workforce retention and turnover dominated the discussions with stakeholders interviewed in the summer of 2014. Industry representatives all complained of workforce challenges associated with high turnover, poaching, and job hopping. Turnover and job hopping for the purpose of collecting a sign-on bonus was not uncommon. The use of rotational schedules, a common industry practice was also used to accommodate and attract a non-resident workforce. Recruiting

and retain workforce was especially problematic for public and secondary services and other non-oil and gas industries.

Several stakeholders cited the prevalence of workers that have no intention of remaining in North Dakota long term. They believe that a substantial portion of the workforce will never live here under any circumstances and that there will always be some level of demand for temporary housing and workforce accommodations, especially in some segments of the oil and gas industry, such as drilling activities. Housing costs and the lack of quality of life amenities were frequently cited as a limitation and impediment to workers' decision and ability to move to North Dakota.

One stakeholder interviewed commented on the social effects of the rapid expansion of the oil and gas industry and the associated in-migration of workers and their families. "The community is really made up of two worlds, the locals and the newcomers. There is definitely a separation."

Stakeholder Interviews, 2015

Findings from 2015 stakeholder interviews were analyzed and organized into the same key themes identified during 2014 stakeholder interviews. Findings are detailed below.

Affordable Housing

Cost of housing was still cited as a significant workforce issue by nearly every stakeholder interviewed. The price point on single family homes had not changed since 2014 stakeholder interviews and availability of single family homes remained an issue. Most respondents cited housing cost and the cost of living in general as a severe limiting factor for workers that would like to relocate and live in the region.

The price for high density housing was reported to have moderated slightly, about 10 to 15 percent, and several respondents in various communities reported that multi-family housing was available. In one community the going rate for "basement room rentals" had declined about 30 percent from \$650 to roughly \$450.

In 2014, lack of infrastructure was cited as a limitation to housing development. In 2015, participants indicated that although progress has been made, some communities were still playing catch up on installation of infrastructure. One community leader reported that they should be close to caught up on demand for sewer and water infrastructure by the end of the 2015 construction season. Other community leaders indicated that counties were still struggling with road maintenance and management. Construction costs for both housing and infrastructure were reported to still be very high as was the overall cost of living.

One community leader cited poor quality construction and expressed concern about the future ramifications of expensive yet poorly constructed housing.

Cost of housing for workers in secondary services was reported to still be especially problematic as housing costs continued to outpace wages in those sectors.

Housing has even been a consideration when recruiting professional positions. One stakeholder reported the local state university lost a hire due to housing costs.

Impediments to Home Ownership

None of the stakeholders interviewed commented on impediments to home ownership as they had in 2014.

Quality of Life Considerations

One industry representative commented the quality of life amenities and roads and infrastructure had improved in the last year. The presence and availability of secondary services and businesses such as grocery stores, restaurants and other retail offerings were reported to have improved since 2014.

Labor Markets

Labor markets were reported to be better in 2015 than they had been in 2014. However, unemployment rates were still very low throughout the region. While nearly all the stakeholders interviewed said the applicant pool had improved in both the oil and gas sector and non-oil and gas sectors, they couched their statements by adding that the labor market was still very thin and turnover remained an issue. Several respondents commented that it was still challenging to fill positions in secondary businesses and services. Public services positions, like police officers and skilled labor positions such as diesel mechanics were mentioned specifically. One stakeholder noted that the national recovery has made it more difficult to attract professional staff. Stakeholder perspectives on labor issues related to the retail sector varied. In one community it was reported that the retail sector was nearly fully staffed. In other communities stakeholders indicated that the retail sector and food and beverage services were still struggling to find workers. There was one report of a restaurant not being able to open all sections of the restaurant due to insufficient staff.

Most stakeholders indicated that the workforce has changed in the last year and continues to change. Stakeholders reported much of the most transient workforce was gone. Stakeholders reported that many of the workers that were just here for the boom had moved on or gone home

and employers had been able to eliminate marginal workers. One stakeholder commented that there were few involuntary layoffs, rather many workers left after having overtime reduced or eliminated or work hours reduced. Some stakeholder firms interviewed reported substantial layoffs since the downturn the end of 2014 and early 2015. To what degree they were involuntary is unknown.

Layoffs as a result of the industry slowdown varied considerably depending on industry segment and individual firms' business model. Several participating firms indicated workforce issues were not substantially different than they were in 2014. Firms with a substantial transportation component indicated they did not lay off any employees and never stopped hiring. They did report cutting hours in response to reduced workload. One stakeholder reported in some ways turnover has actually gotten worse due to employee burnout associated with the difficult rotational work schedules. Housing costs were also frequently cited during exit interviews as the reason for leaving.

Firms in other sectors of the industry reported recruiting skilled workers remained challenging, but indicated turnover had moderated and was not an issue as it had been in the recent past. Operators that largely subcontract activities to service firms generally did not report layoffs. That however was not generally the case with service firms involved in activities related to drilling and fracing. Those firms reported substantial layoffs since the end of last year.

Turnover and Poaching

Stakeholders reported that workforce turnover had improved and there seemed to be less employee poaching and job hopping. It was suggested that with fewer job opportunities people were not moving from job to job as reported in 2014. However, stakeholders indicated that while turnover was better, the labor market was still relatively thin with the potential for turnover issues.

Workforce Intentions

Several stakeholders interviewed reported the composition of the workforce was changing as they were starting to see more families in place of unaccompanied workers. Several participants noted growing school enrollments, especially in elementary grades. Many respondents indicated that the most transient portion of the workforce and those that were looking to make a quick buck were largely gone as a result of the downturn. However, one stakeholder was quick to respond that there were still jobs and opportunities for those that are committed.

Practices and Trends in Workforce Shifts

Several firms indicated greater flexibility in terms of how individual workers structure their rotational schedules. However, ‘fly in – fly out’ rotational schedules were still prevalent industry wide.

Employer Provided Housing and Housing Allowances

Changes to housing allowances and employer provided housing varied considerably. Some stakeholders reported that firms had not made changes to housing benefits and still either provide housing or housing allowances. Others eliminated travel costs or reduced services such as catered meals at employer provided housing. Another firm indicated they plan to shift from employer provided housing to a housing stipend. Others have changed or added incentive programs to encourage employees to buy housing in North Dakota thus eliminating the need for the employer to provide housing or housing allowances to non-resident workers.

Industry representatives reiterated their desire to get out of the housing business. However, there was still a substantial non-resident workforce, and providing workforce housing was still part of their business model. Community leaders commented that crew accommodations were still part of the housing mix. Industry representatives stated as they did in 2014 that they would prefer their workforce live in the region. However, they were forced to continue to accommodate non-resident workers, because the local labor pool was not of sufficient size or qualifications.

Stakeholders reported school districts and other public sector entities were still providing housing at a subsidized rate for teachers and public service providers. Stakeholders reported the intent was for teacher and public service providers’ accommodations to be temporary and used only until other accommodations could be secured. However, no other affordable housing has become available and subsidized housing for teachers and public service providers has become more permanent. One school district has 27 housing units, most of which are multi-family apartment buildings. Several counties own or control multi-unit housing structures.

Industry Response to Falling Prices

Business and industry representatives all emphasized the need to cut costs and improve efficiencies across all sectors and activities. One of the first cost cutting measures was reductions in overtime and hours. Some industry representatives reported reductions or elimination of overtime and/or reductions in hours made it less attractive and financially feasible for some non-resident workers to work in North Dakota and live elsewhere resulting in some voluntary attrition. A representative of an oil field services firm stated that the downturn hit them hard forcing substantial layoffs and rate restructuring. Competition for business was

reported to be very intense. Some firms had substantial layoffs in response to reductions in drilling rigs, however industry representatives indicated not all layoffs were forced layoffs.

Firms reported improving efficiencies and reducing costs were a high priority and a bit of a paradigm change for the industry. The industry has not been particularly focused on efficiency, especially in recent years where the industry focused on securing lease holds. One industry representative suggested historically if you work for the oil and gas industry you get a white pickup and that may not be the case in the future. It was also noted how efficiencies have already improved dramatically. One participant cited that since 2010-2011, the time required for drilling and well completions has been cut in half. All industry respondents interviewed indicated the industry is fully focused on continuing to improve efficiencies and cut costs. One firm reported workers in one segment of their operations volunteered to have their daily per diems reduced in an effort to help contain costs.

Some segments of the industry reported no significant changes since last year. Industry representatives interviewed indicated some segments of the industry, (e.g., pipelines or gas processing) were fairly stable and less affected by the downturn in drilling activities. In fact pipeline operators suggested a downturn in price actually makes pipelines more competitive relative to other forms of transportation such as rail transportation.

Other segments of the industry did not lay off any workers and remained as busy as ever. In some cases they have picked up work previous done by small operators that were unable to weather the downturn. However, it was noted that even though there were no layoffs and business remains strong, they were forced to adjust their rates to remain competitive. On a positive note, several firms that had a substantial number of positions eliminated in early 2015 indicated they were almost to the point where they were going to begin hiring again.

Attrition/Improving National Economy

Most participants indicated in addition to layoffs, there had been some attrition due to improving economic conditions elsewhere in the United States. Stakeholders commented that for some worker's reductions in overtime, hours, or other benefits, such as travel expenditures, made work in North Dakota less economically attractive. Stakeholders interviewed suggested that for many workers, a super-premium wage was needed to make working in North Dakota and living elsewhere financially feasible. Stakeholders indicated that with improving national economic conditions, workers can take a job that pays less at home and be equally well off financially by eliminating the cost of commuting and the high cost of housing in North Dakota.

Hotels

Some concern was expressed that hotels had overbuilt, especially in the extended stay category. In both Minot and Dickinson, 2014 year-end occupancy rates had returned to approximately the same level as in 2008. The number of rooms had grown significantly and it was reported that hotels were no longer being used for workforce accommodations as had been the case in the 2010-2014 period.

Overall Effects/General Observations

One community leader suggested that the dust had started to settle in their communities, while noting other communities were still playing catch up. Most of the community leaders commented that growth has not stopped; rather communities were not growing as rapidly as they had previously. One participant indicated the 7 to 10 percent growth their community had been experiencing was too much and that a 2 to 4 percent growth rate was much more manageable. Stakeholders generally described the slowdown in activity in the oil and gas industry as a good thing for communities in the region. Another participant commented that things have changed, but not so dramatically as portrayed by the media.

One respondent expressed concerns about the continued lack of affordable housing and the only currently available tool, the state Housing Incentive Program and questioned whether subsidies and incentives for builders is good long term policy. The community leader suggested the program may be effective in the short run but expressed concerns that in the long run there is the potential to over build and that often the housing units are not well built. The takeaway point was that it is important to not build a permanent solution to a temporary problem.

One industry representative indicated that at the peak of the boom the pace of hiring was not sustainable; hiring and training upwards of 30 people per week. Training activities would take place 24 hours a day. Another industry representative indicated the slowdown is not all bad for the industry either. It forced the industry to examine and review what they are doing and how. The previous pace of the boom was unsustainable; labor force burnout becomes a limiting factor.

Other

The region is still lacking adequate social services. The downturn has also been tough on local and community non-profits. In this environment of cost containment, corporate donations were often reduced or curtailed.

Key Findings Stakeholder Interviews, 2015

Despite the downturn in drilling activity in 2015, affordable housing was again identified as one of the most critical workforce issues in western North Dakota. In 2015, it was reported there had been some softening in rental rates for multi-family units, but the cost of single family housing remained very high. The continued high cost of housing was cited as a limiting factor for workers that would like to relocate and live in the region and was still especially problematic for secondary businesses services and the public service workforce.

Lack of quality of life amenities was frequently cited as a key consideration in 2014. The lack of quality of life amenities was perceived by stakeholders to be an impediment to attracting and retaining a resident workforce. In 2015, most stakeholders indicated that availability of quality of life amenities had improved with greater presence of secondary services such as grocery stores, restaurants and other retail offerings.

As a result of the industry slowdown in early 2015, issues related to workforce shortages, turnover, job hopping and poaching were reported to have improved. However, most stakeholders were quick to point out that unemployment rates were still very low and while the labor pool had improved, it was still challenging to fill positions in public and secondary services and some skilled labor positions. Stakeholders indicated turnover was still high and hiring practices unchanged among certain industry activities, namely transportation related activities.

Some segments of the industry experienced substantial layoffs, while other segments saw little change in employment and hiring practices. It was reported that at least some workforce reductions came in the form of voluntary attrition due to a reduction in overtime or hours. It was reported that for many workers the wage premium associated with long hours and overtime was necessary to offset economic and other issues related to working in western North Dakota and living elsewhere. Without that wage premium many workers simply returned to their homes elsewhere.

Rotational schedules that accommodate a non-resident workforce and employer-provided housing or housing allowances were still prevalent in 2015. While industry stakeholders indicated the desire to reduce or eliminate providing housing or housing allowances, they indicated that employee housing benefits were necessary to attract and retain workers. While stakeholders reported the need to reduce costs, employer provided housing or housing allowances were still prevalent. Several stakeholders stated that the workforce has changed and is continuing to change as much of the most transient workforce has left the region and communities are seeing a greater prevalence of families with small children. Growing school enrollments, especially in elementary schools was cited by several stakeholders as evidence of the shift.

Perhaps the most significant change was the industry's response to the reduction in oil prices. The drop in oil prices and the substantial scaling back of drilling activities has replaced a boom type mentality with one that was very much focused on cost cutting and improving efficiencies. Layoffs, elimination of overtime, reduction in hours, improved efficiencies, reduced rates, and elimination of employment perks were just some of the strategies used to cope in the new price environment. While many industry stakeholders indicated they would like to get out of the housing business, that model was still reported to be necessary to attract workers. Some firms reported provided incentives for home ownership rather than continue to pay for workforce housing.

Key Findings Comparison 2014 and 2015

Issues related to housing, attracting and retaining workers and employee poaching and turnover were the dominant themes identified by stakeholders in 2014. Nearly every stakeholder cited the lack of affordable housing as one of the most pressing workforce issues. The cost of housing was cited as an impediment to attracting and retaining a qualified workforce, especially in public and secondary business and services.

In 2015, while stakeholders reported slight moderation in housing costs for multi-family units, rental rates were still some of the highest in the country and the cost of single family housing had not moderated. Cost of housing was still cited as a limiting factor for those workers that desire to move to North Dakota. Cost of housing was also cited as a limiting factor for secondary services (e.g., retail, food and beverage services, hospitality) and public service entities to attract and retain workers.

Workforce shortages, inability to recruit and retain qualified workers, employee poaching and high turnover rates were identified as critical issues across all economic sectors in 2014. In 2015, stakeholders indicated the labor pool had improved as had workforce turnover. However, they were quick to point out that unemployment rates were still very low and that some segments of the industry, e.g., transportation, still struggled with issues related to turnover. Certain skilled labor positions such as diesel mechanics were in short supply and in some communities there were still labor shortages in non-oil and gas sectors and secondary services. Housing assistance for personnel in the public sector (e.g., teachers and law enforcement) was still widespread.

The dramatic drop in crude oil prices in early 2015 resulted in a very different economic environment compared to 2014. Firms were forced to improve efficiencies and cut costs. Cost cutting measures such a reduction in hours, overtime hours and other perks and benefits were reported by all industry stakeholders. While there were substantial layoffs in many industry segments, stakeholders indicated there was also voluntary attrition as a result of cost cutting measures such as reduction in hours and overtime hours. However; workforce housing benefits

were still widespread. While firms have made adjustments to workforce housing perks in an effort to reduce costs, stakeholders firms indicated that housing subsidies were still necessary to attract and retain the necessary workforce.

Stakeholders commented that the slowdown from a community perspective was good as the double digit growth experienced in 2014 and the previous year few years was not sustainable. Even some industry representatives suggested the slowdown was not all bad as the previous pace of activities and challenges associated with recruiting and retaining a workforce under conditions present in 2014 was not sustainable.

Despite very different market conditions, many of the workforce issues identified in 2014 remained key considerations in 2015. To what degree the workforce issues that were identified in 2014 and 2015 remain, improve or worsen will depend on future economic conditions.

Focus Groups

Focus groups were held in 4 communities in western North Dakota. The focus groups provided additional information and understanding of quality of life issues from the perspective of a new resident not directly employed by the oil and gas industry. Most of the participants did not work in the oil and gas industry; however some participants had spouses that worked in the oil and gas industry. Most of the participants did not have North Dakota connections such as living previously in North Dakota or a spouse that was from North Dakota. Several participants followed spouses or partners that work in the oil and gas industry or found work here. Others came to the state looking for work after hearing of plentiful job opportunities in the state. Most of the participants worked in public and secondary services, such as law enforcement, social services, school district and banking, although a few worked in skilled labor and a few worked in the oil and gas industry. All of the participants were new residents, with residencies that ranged from a few months to several years and future intentions varied. Some participants planned to stay in North Dakota long term while others planned to stay in North Dakota for a short period of time to gain experience and then move on or back to where they came. Some indicated future plans were contingent on work opportunities. Other said they would at least stay until their children were done with school.

Positive Observations

Participants were asked to comment on what they liked about the community. Findings are detailed below.

Ray

Most participants indicated they liked the small town feel and community mindedness present in Ray. One participant researched several communities in the region before selecting Ray. Another participant's previous residence was in a rural area and wanted to remain in a rural setting in North Dakota. Several participants commented that Ray is outside the epicenter of oil and gas industry activity. They specifically wanted to avoid larger communities and the potential "bad stuff" present in larger communities like Williston. Participants generally liked the rural, small, family oriented feel of Ray. Those participants with children praised the school district and teachers in the Ray school district. The local 4-H program was also identified as positive presence in the community. One participant commented that the people in the community have been very welcoming.

Dickinson

One participant commented that great opportunities are available in the community for individuals in all stages of their life and careers. There are opportunities for youth to gain valuable work experience and there are academic and professional opportunities here that do not exist elsewhere. One participant recounted that after deciding to rejoin the workforce, specifically targeted North Dakota in the job search because of all the opportunity present in North Dakota.

Another participant commented that at the core, Dickinson is filled with really good people that care about their community. Participants agree that the community should not lose sight of its identity and what makes Dickinson Dickinson. Participants said they don't want to see the recent or future growth change the community into something different.

Watford City

Several respondents indicated they like the small town feel of Watford City and others commented on how they fell in love with the people in the community. One respondent indicated she would stay even if her spouse was not from western North Dakota. Another commented that it is important to get involved with the community. If people don't get involved, they will have a difficult time and hate living here. Participants commented that more families are moving here and staying here compared to Williston which has experienced an exodus of transient workers. One respondent commented that there are now twice as many youths participating in local parks and recreation programs. Another commented that it has been very nice to see so many new people come into the community. Most seemed to agree that residents of Watford City are very welcoming and the city and community are quite proactive in terms of the business environment and working to provide public services like parks and

recreation. One respondent commented that the community does a good job maintaining, repairing and restoring older buildings. Participants also commented that the school system is good and the area has excellent hunting and fishing opportunities. Another participant noted they largely feel safe in the community and felt confident that if you were to yell for help people would rush to help.

Killdeer

The group generally agreed that they like the small town feel of Killdeer. Although one participant noted that the community has grown too quickly, stating that if they didn't already have a house in Killdeer, they would choose to live in a small neighboring community. Several respondents commented that the school is very well cared for and a source of pride for the community. Another described the school system as "fantastic". Some participants indicated they "absolutely love it here" and are grateful to be in Killdeer and North Dakota. Participants also commented on the abundant natural resource amenities, however many newcomers do not realize there is a national park an hour away.

Negative Observations

Participants were asked about what they didn't like about their community. Findings are detailed below.

Ray

When participants were asked about what they don't like about the community, the overwhelming response was lack of housing and the cost of housing. One participant indicated they were very fortunate as the previous owner of their home turned down a higher cash offer because they wanted the home to go to a family. Participants commented that it was very difficult to justify the high cost of housing with the knowledge that the oil and gas industry can be cyclical with boom and bust periods. One participant indicated their housing was paid for by their employer, otherwise they could not afford the \$3,000 per month rent.

The high cost of living and public services was also cited as negative considerations. The cost of water, cable TV and other services as well as the lack of choice for services like cable TV was viewed negatively. Participants all agree that the waterlines that have not yet been replaced need to be replaced. One participant reported "the water is still orange". Several participants indicated that they felt the community was not welcoming. Another participant noted that Ray was one of the last communities to see any growth.

Dickinson

Participants indicated that while there have been some recent welcome additions; Dickinson still lacks lifestyle amenities like arts, cultural and recreation opportunities. Participants commented on the need for additional retail and restaurant options and one participant commented on the need for additional recreation opportunities for those interested in a healthy lifestyle. For example, there are no walk or bike paths and a lack of things to do if you don't want to just go to the bar.

One respondent commented that as a result of recent growth, Dickinson has lost many of the benefits of a small community without reaping the benefits of a large community. For example, the community has experienced an increase in crime. Respondents indicated they still feel safe in the community, but expressed concerned about what might be coming in the future if the community continues to grow and crime rates grow with the community.

Other negative comments revolved around cost of housing. Respondents agreed that while housing is now generally available, it is not affordable. One respondent didn't like the weather in the winter or the bugs in the summer.

One participant reported feeling like an outsider when first moving to Dickinson, which was prior to the recent growth related to expansion in the oil and gas industry.

Watford City

Several participants commented on the lack of opportunities for social interaction, especially for those that have fairly high profile public services job like law enforcement.

There was general agreement among all participants that there are many misperceptions about the community. News about Watford City always seems to be negative and only the "bad stuff" that happens in Watford City makes the news and the good proactive work of law enforcement goes unnoticed. Participants commented that residents and the community have to battle the perception that it's not safe for kids to come to Watford City to participate in youth events like sports events, etc. The perception of "wild, wild west" is a not accurate. However, respondents did agree that there were some bad things too. Some people are very inconsiderate and just trash the place and then leave. Other participants shared they had interacted with some people whose activities seemed suspect. Another commented that people say terrible things about Watford City on Facebook and that those comments elicit a very defensive response.

Killdeer

While the boom has had a lot of positive impacts, participants generally agreed there are negative impacts as well. When so many people from so many places that are confined to a small place, there are problems with drinking, fighting and those sorts of issues. Participants agreed that having to contend with unruly individuals and behavior is representative of negative impacts associated with rapid growth in the oil and gas industry. Problems with human trafficking and an increase in drug trafficking were also cited as serious negative impacts associated with recent rapid growth.

Participants agreed that housing was ridiculously expensive, there was no housing available and there was no building underway. One respondent commented that if housing was available and some amenities were developed people might stay long term. Another respondent shared that there was no option but to purchase an old house, and renovate it. It was reported that the city has 10 available lots but will not sell the lots. One respondent stated that people can't build housing because they cannot buy a lot. Participants also cited difficulty in securing contractors. Participants reported there are insufficient local contractors and there have been reports of poor and shoddy construction. Participants reported it is very difficult to hire contractors.

Participants were of mixed opinion when discussing how friendly and welcoming local communities are to newcomers. Some communities were viewed as more welcoming than others. Several participants indicated positive experiences getting to know longtime residents. Other participants reported a different experience and described the community as clannish, cliquey and closed. One participant offered that some new residents don't like it here because they don't feel welcome and there isn't anything to do. Another respondent commented that even though she has been in the community for some time, she still feels like an outsider.

Other participants indicated having the opposite experience. They have found their neighbors to be very welcoming and helpful. Another respondent commented that the ranching community has been very welcoming. Another indicated they hadn't experienced the feeling of not being welcome in the community. And yet another participant indicated that after being here for a few years, people were now starting to be more welcoming.

Respondents agree that Killdeer was lacking businesses and services. One respondent commented that the community was lacking everything. There is only one grocery store and it was reported to be very expensive.

The group all agree that the community is lacking in quality of life amenities, especially entertainment options for both youth and adults. One participant suggested there are no youth activities once school is out. Baseball diamonds were supposed to be out of service for a year,

however at the time of the focus group, they still were not rebuilt and a hotel occupies the space where the ball fields were previously located. One respondent offered that they participate in a bowling league in another community, but there is nothing similar in Killdeer. Another offered that there is a women's golf league but it is very cliquey. One participant commented that while the natural resource amenities are great, the opportunities for outdoor recreation are not well organized. For example, there are no organized activities or even a bike path. The only option for bike riding is to ride on the roads and highways. However, it simply is not safe to ride a bicycle on the roads.

There was agreement among participants that health care options and availability are very limited. There are no local physicians, dentists, optometrists or chiropractors. The only local health care provider is a clinic staffed by nurse practitioner or physician's assistant.

Things Community/State are Doing Well

Participants were asked to comment on things this community was doing well. Responses are detailed below.

Ray

One very positive addition in the community has been the addition of a local law enforcement presence. Respondents all agree that a dedicated law enforcement officer has been a very good thing, but added the community could use a second officer.

Respondents all agree that the school was a positive presence in the community. Sports at the school were especially a source of pride for the community. Also one respondent commented that the school does an excellent job of encouraging local kids to reach out to be inclusive of the new students. Respondents also all commented that the community really pulled together after a recent tragic car accident in the area.

Dickinson

Respondents agreed that social services and law enforcement were making efforts to improve services and have made some progress in expanding services. One respondent reported that housing and childcare were the two biggest concerns when relocating. However, after school programs have been very good and helpful in bridging the childcare gap between when school is out and the end of the workday.

Watford City

Participants agreed that Watford City has taken a proactive approach to addressing community needs. The county commission and various organizations such as the chamber are attempting to address the need for more social and recreational opportunities. The community also has a proactive park district with a history of providing parks and recreation opportunities.

The community has done a good job developing walking paths, creating renaissance zones and repairing and restoring older buildings. Participants agree that those efforts are starting to be more visible. A new recreation center is currently under construction, as is a new school and hospital. There are several new housing developments and the addition of some secondary services such as grocery store, restaurants, other retail options have been welcome additions.

While participants expressed frustration with various state government bodies lack of action to address impacts associated with recent rapid growth, one respondent commented that has been some improvement in communications between the cities and state agencies.

One respondent noted that there are some oil and gas firms that are good community partners and have been especially supportive of 4-H programs.

Killdeer

All new park playground equipment in Halliday has been a welcome addition and great for the children in the community. Participants also cited the construction of the new swimming pool in Killdeer as a positive addition to the community. The pool is currently under construction and participants indicated it will be a welcome and positive addition to the community. Participants also noted some slight improvement in terms of youth activities with a new t-ball and soccer program in Halliday.

Participants reported positive improvement in public services. The city and county's commitment to invest in law enforcement has meant a much better law enforcement presence. One participant reported there is now a police presence in Halliday. Participants also gave high marks to the ambulance service in Killdeer. Participants reported that the ambulance service helps with home visits and public health services.

Things Community/State are Not Doing Well

Participants were asked to comment on things where the community has perhaps not met expectations. Responses are detailed below.

Ray

Several participants perceived the community as quite closed to newcomers and not very welcoming to new residents. However another participant commented that having kids in school really helped break the ice. Generally speaking those participants with children in school indicated their experience in terms of feeling welcome in the community was better than those without children. Another respondent indicated people were more welcoming once they realized his wife and children had moved to the area as well. Several participants agree that those long-time residents that had not personally benefited from expansion in the oil and gas industry were less welcoming than those that had personally benefitted. The lack of activities for children outside school sports was cited as an area where the city could do better. Participants complained that the response time from the Williams County Sheriff's Department was very slow.

Dickinson

The city needs to do a better job of communicating what type of events and activities are available using online tools and social media. One participant commented that new residents do not subscribe to the Dickinson Press and that other communication tools need to be used to communicate with new residents.

Watford City

Participants commented that while various groups sponsor events, promotion and communication of those events is sometimes lacking. They commented that activities are of limited value if no one knows about them.

There was considerable discussion about shortcomings related to communications with various state government entities. There seemed to be general agreement that the city has not done an effective job or been successful in communicating the impacts and the needs of the community to various state bodies such as the legislature, or the Industrial Commission. In general participants commented that communication between local and state government is very strained. Participants were frustrated by the lack of response from the state. They felt that the oil and gas industry in their community and the region generates a huge amount of state government revenue, but there is lack of interest by the state in addressing the significant local impacts that have occurred as a result of oil and gas industry activity.

Several participants cited concerns with public health, safety and welfare and commented that these issues were not being appropriately addressed. One respondent commented the state and county may have rules in place to protect public safety, but lack enforcement. Respondents

expressed concerns over saltwater spills and cited an instance where it took 3 weeks to get a state public health inspector to examine a salt water spill. Participants also voiced concerns and questioned if there are appropriate plans in place in case of a disaster. Others questioned whether oil and gas companies are required to have emergency response/disaster response plans in place.

Participants reported that city, county and state law enforcement is very understaffed as is the county prosecutor's office. One respondent commented that the state needs twenty-five additional highway patrol officers, but instead added only four. Another respondent made a similar assessment for game and fish wardens, three additional wardens were added when ten to twelve are needed.

Several participants cited hazardous road conditions and commented how dangerous the roads were in McKenzie County. One participant reported McKenzie County is number one in the state for the number of fatalities. Another respondent has had four flat tires in the last six months as a result of driving on gravel roads to avoid traveling on Highway 1806. The participant commented that while driving on gravel roads takes longer and is tough on tires, it is safer than traveling on Highway 1806.

Several respondents were critical of ND Department of Transportation (NDDOT). They cited the lack of NDDOT maintenance budgets. Ambulance, fire, police and other first responders are expected to respond but road maintenance is often lacking especially in the winter. Participants reported that the county has at times been forced to do road maintenance on state roads, specifically stating that the county has frequently had to throw sand on intersections. One respondent indicated that most of the winter travel problems are a result of NDDOT inaction.

Finally, the combination of new residents unfamiliar with road conditions in the winter and oil and agriculture industry traffic has created challenges. Many new residents do not understand driving conditions, namely driving on gravel roads, winter driving or the presence of agriculture equipment on roads and highways. Newcomers often complain about tractors on the roads and don't understand that tractors and farm equipment are allowed on roadways.

Killdeer

Participants were generally dissatisfied with local government. Participant criticized public entities for lack of transparency and it was suggested there was a lack of understanding of open meetings laws. Some participants noted that leadership positions on local boards seemed to be filled by a small group of local business people and that those boards lacked interest in addressing current issues. One respondent reported that a local organization approached the

local park board about organizing a youth flower planting event and that the park district was not receptive to the effort.

Issues with zoning policy, the lack of defined policies, makes seemingly simple things like placing a business sign difficult. Zoning regulations were also cited as a limitation to housing construction in rural Dunn County. The minimum lot size is 5 acres and then the land must be rezoned from agriculture to residential. The minimum lot size makes lots cost prohibitive and one respondent reported the county is resistant to rezoning land for residential construction.

Participants reported there were some housing developments in the city, but indicated little progress has been made due to unspecified development issues. A few housing units were being constructed behind the school, but that housing was for city employees. It was reported the Halliday school district has built a duplex for school employees. Some participants were critical of city restriction on the type of housing allowed within city limits. Currently the city does not allow any mobile homes or modular housing. However manufactured housing is permitted. Participants also cited the County's lack of housing assistance for county employees.

Participants were critical of school district policy related to busing. Respondents complained that the school district will no longer pick up students that live in an area that was annexed into the city. It was reported that several buses could easily transport kids so they would not have to walk by a busy convenience mart on their way to school. Participants felt the school district was not being very accommodating as it could be.

Participants cited poor communications between residents and city government and a lack of transparency. Participants were generally critical of city government and their lack of attention to the needs of the community in response to rapid growth. Many suggested that city government is still operating like they did prior to expansion in the oil and gas industry. Participants expressed frustration in the seeming lack of understanding or support for expanding local businesses and services.

Things They Would Like to See Added/Done Differently/Things The Community Needs

Respondents were asked to comment on what they would like to see added in their community or if there were things that they believe should be done differently. Responses are detailed below.

Ray

Additional recreation opportunities for youth was cited as a community need. Specific suggestions included a recreation center, boys and girls club, and splash pad and swimming pool. Participants also noted that the baseball field is currently on the south side of Highway 2 and that

it is very dangerous for kids to cross that highway. While the school has plans to move the field, they all agreed that all school facilities need to be on the same side of the highway.

Other suggestions included the need for some basic retail options such as a better grocery store and additional entertainment options. Most respondents indicated additional retail options were not as critical as residents are accustomed to driving to larger neighboring communities for most retail offerings. One respondent suggested the community could perhaps use some sort of neighborhood or community watch program to help bridge the need for additional local law enforcement presence. A better system of communication regarding notifications of registered sex offenders was also suggested.

The need for and access to public services was cited. Access to a landfill for trash and lawn waste as well as recycling services were cited as specific public services needed.

Watford City

Participants indicated the community was lacking quality of life amenities, and recreation options. Specific suggestions included a bowling alley, hockey or curling facilities, something that would provide recreational opportunities for young people that does not involve alcohol. Participants cited the need for addition retail offerings; dry cleaning and general retailer like Shopko were specific examples. Hours of operations of local businesses was cited by one respondent as an issue, especially for restaurants, suggesting that many businesses were still operating like it the “good old days” with businesses closing relatively early. Participants suggested businesses should have extended hours to accommodate the oil and gas industry workforce as well law enforcement and other public services that operate 24 hours a day.

Participants also expressed a desire for new local business to have a connection to their community and give back to the community by supporting youth and other civic events and programs. One respondent used the example of a local business that supports youth sports because of their commitment and connection to the community.

Participants suggested better communication of events and activities in the community was needed. It was suggested that better communication would encourage participation which would help to make new comers feel welcome and encourage them to become vested in the community. Another participant suggested the need for a good notification system to alert residents of sex offenders. One participant indicated there are currently about 70 registered sex offenders in the area.

Participants also cited the need for the community to move to a system of paid professional emergency services and first responders. Currently emergency services are staffed by volunteers.

Killdeer

Participants all agree that the community needs all types of businesses and services and that there are small business opportunities in the community. Currently the community has very limited retail and business and personal services offerings.

Respondents also all agree that more organization recreation activities are needed. Participants indicated they would like to see addition recreation opportunities for youth and adults. While the new swimming pool will provide some opportunity for youth in the summer, however there are very limited recreation opportunities for adults.

Participants cited the lack of senior housing, nursing homes and assisted living facilities. It was reported the local nursing home has a waiting list. Participants also commented that social service programing such as kids' safety fairs, and health fairs is lacking. Social service programing efforts are lagging behind other communities in western North Dakota.

Challenges

Respondents were asked to comment on the challenges that are facing the community now and in the future. Responses are detailed below.

Ray

Housing costs and the cost of living were identified as challenges going forward. Participants expressed concerns that wages and benefits, such as housing allowances and per diem in the oil and gas industry are being eliminated or modified, although housing costs and the cost of living remains high. One respondent offered that despite the downturn, a gallon of milk is still \$5. Participants commented on the difficulty of attracting workers for secondary businesses considering the high cost of living in the area.

Another consideration going forward was the fear that the city and state would have an knee jerk reaction to the slow down and start backing away from infrastructure and other development initiatives. Participants agreed that Ray, like many other communities, was still playing catch up to address the needs for public goods and services as a result of expansion in the oil and gas industry. Concern was expressed that if the city backs off efforts to respond to the need for

public good and services and there is an upturn in industry activity, the community will be back in a reactionary mode as it has been for the past few years.

Participants commented that perhaps the greatest challenge going forward is the feeling that there are two separate communities. Participants general perceived a disconnect between long-time residents and new residents.

Watford City

Housing dominated the discussion as the most challenging issue facing the community. All participants agreed that there is a severe lack of affordable housing. Participants felt housing costs were completely out of line, describing rental rates of \$2,300 to \$2,900 per month as “ridiculous”. Participants noted that the school district must provide housing for teachers. Teachers are able to rent a 500-700 square foot apartment for approximately \$800. Respondents cited rental rates for various types of housing reporting twin home were renting for \$3,500 per month and single family homes in a one new development were starting at \$259,000. Another participant referenced twin homes for sale at \$365,000. Participants all agreed that housing costs were especially problematic for public service employees who do not earn comparable wages to many of the high paying jobs in the oil and gas industry. Participants indicated some people come here with intentions of staying but end up leaving because housing costs are prohibitive. One participant suggested housing issues must be addressed in order to attract people to move here and stay here. Another suggested that people that are committed to being here will find a way to make it work. One participant was critical of the push to transition away from crew camps and suggested that there is inadequate affordable housing available and those in crew camps can’t afford to transition out of crew camps.

Participants all agree that more support from the state is needed. They felt that the legislature has not provided appropriate support for local needs such as law enforcement. Participants also expressed concerns that state regulators are not adequately focused on the potential risks and hazards associated with oil and gas industry development. One suggested the uncertainty of the effects of the growing size of well pads and questioned the impacts of sites with multiple wells, large storage tanks and treatment facilities.

Killdeer

Respondents indicated that the biggest challenge was the city’s resistance to growth and development efforts, in both residential and commercial development. Another respondent contrasted Killdeer with Watford City as a community that has handled the impacts associated with growth well and embraced the change necessary to cope with the impacts associated with growth in the oil and gas industry. Participants felt the city has been very resistant to change and

is functioning as they had pre-oil development. Several participants suggested the community has resisted investing money for fear the boom will eventually bust. As a result there has been little to no investment activity. Another respondent commented on the mentality of some long term residents. It was suggested that some long term residents have the mentality of only welcoming people that relocated permanently.

Lack of housing and amenities was cited as a critical challenge. With very limited housing available, little under construction, and a lack of quality of life amenities participants felt it is very difficult attract people, for either the short or long term. One respondent commented that additional quality of life amenities might help attract people long term. Another respondent suggested that if housing and other amenities were available, people might be inclined to move here and stay here.

What is Being Done to Address Challenges?

Participants were asked to describe how has the community responded to challenges? Responses are detailed below.

Ray

The addition of a dedicated law enforcement officer was cited as a positive initiative to address some of the challenges identified. New sewer and water lines were also welcome additions.

Watford City

The county and city are providing subsidized housing for public service employees. Without the subsidized housing several participants indicated they would not be able to afford housing and would have to leave the community without it. The new law enforcement center was also cited as a welcome addition as is the new recreation center and the new high school that are currently under construction.

Respondents commented that there are many people in the community that are committed to being here that are trying to address pressing issues and deflect misperceptions about the community. The group agreed that those residents are very committed to the community.

Killdeer

Respondents commented again that because they perceived the community as resistant to change, very little is being done to try to address the impacts associated with expansion of the oil and gas industry in the region. Participants expressed frustration over the lack of communication

between city government and residents. Respondents did however cite the willingness to invest in law enforcement as one example of a positive action in response to a critical need.

Key Findings Focus Groups

Responses represent a range of perspectives on the strengths, weaknesses, opportunities and challenges present in western North Dakota. Response are not intended to be representative of nor generalizable to the larger population. Rather, the purpose and value of qualitative efforts like focus groups is to identify the range of issues and considerations present in western North Dakota.

A common theme from all the focus groups was that participants like the small town feel and sense of community. Respondents in all groups also had very positive things to say about the schools in their respective communities. Some participants commented how communities were very welcoming while others had the opposite experience and commented that they feel like outsiders and not made to feel welcome.

The high cost of housing and cost of living was another common theme. While some commented on the lack of housing, most participants agree that the availability of housing was better, but is still very expensive, especially for those that work in secondary or public service sectors. The lack of quality of life amenities such as retail options, business and services, and entertainment and recreation options were also frequently cited as community shortcomings. Participants commented that outside of school sports activities there were few entertainment and recreation opportunities for youth.

When asked about what things their community was not doing well, responses were varied. Some respondents commented that the community was closed to newcomers, while others indicated their community needs to improve community events and activities are communicated. Others complained that more needs to be done to communicate local needs to the state government. Understaffed law enforcement and general dissatisfaction with local government were also frequently cited examples of things their communities were not doing well.

Quality of life amenities, retail, entertainment and recreation opportunities were frequently cited as things their community needs. The need for improved public services including additional law enforcement, professional emergency service responders, and social service programing was also frequently cited as examples of things they would like to have in their communities that currently is lacking.

Example of what communities were doing well also varied considerably. Improved presence of law enforcement, improvements in social and public services, infrastructure expansion and youth

recreation opportunities were cited as examples. Generally speaking respondents agreed that while there were still many needs their communities have been working hard to address those needs and some of those efforts are starting to become more visible.

Housing, housing costs and cost of living were dominating themes when the discussion turned to challenges facing their community. The cost of housing and the cost of living is especially problematic for public service employees that do not earn wages comparable to those in the oil and gas industry. Concerns related to the continued need for the development of public and private goods and services was also a common theme. Resistance to development activities and concerns over a pullback in infrastructure and development activities as a result of downturn in industry activity were also cited.

While communities still face challenges, participants identified several areas where their community has taken steps to address those challenges. The addition of law enforcement officers, subsidized housing for public service employees and the addition of new facilities like a recreation center were cited as examples of where their communities have taken steps to address challenges.

Survey of Participating Firms

Sixteen oil and gas industry firms participated in the data collection. The sixteen firms had a total of 4,986 employees and 1,297 contract employees for a total of 8,113 workers (Table 2).

Table 2. Total Number of Employees and Contract Employees, Participating Firms, Survey of Participating Firms, 2015			
Participating Firms	Employees	Contract Employees	Total
(n=16)	4,986	1,297	8,113

Participating firms provided a cross section of services related to all stages of oil and gas exploration and production. Participating firms often provided more than one category of service. Eleven of the 15 firms reported performing activities related to ‘production and operations, well service, oilfield maintenance and transportation services’ (Table 3). The next most frequently reported category of activities were ‘fracing and well completion services’ and ‘pipeline and gathering systems operation and maintenance’ with 7 firms that indicated they perform those activities. Five firms indicated providing ‘well site preparation, drilling and geophysical services’. One firm indicated it provided ‘processing and refining activities’. To gauge how many employees were related to each activity, the total employment per activity was tallied. Firms that performed ‘production and operations, well service, oilfield maintenance and transportation services’ had a total of 6,519 employees. Firms that provided ‘fracing and

well completion services’ and ‘pipeline and gathering systems operations and maintenance’ had about 5,000 employees each. Firms that provided ‘well site preparations, drilling and geophysical services’ and ‘processing and refining’ had the fewest number of employees with less than 1,000 each. Findings are detailed in Table 3.

Table 3. Oilfield Activities, and Services Provided and Number of Employees, Workforce Survey		
Item	Number of firms	Number of employees
Infrastructure Construction, e.g., roads, pipelines, municipal services, rail	3	1,789
Well site preparations, drilling and geophysical services	5	945
Fracing and well completion services	7	5,280
Production and operations, well service, oilfield maintenance, and transportation services	11	6,519
Processing and refining	1	698
Pipeline and gathering systems operations and maintenance	7	5,094
Professional services, e.g., engineering, geology	3	2,063
(n) ¹	(--)	(--)
¹ Does not sum to total as firms can provide more than one industry activity.		

Each of the firms was asked to report what percentage of their workforce lived in the local area, elsewhere in North Dakota, in neighboring states or elsewhere in the United States. Both a straight average and weighted average based on the number of employees of each participating firms was calculated. The two averages varied only slightly suggesting the sample was not distorted by one or two firms with a large number of employees. Firms reported just under half of their employees lived in the local area with another approximately 15 percent that lived elsewhere in North Dakota (Table 4). Only 10 percent lived in neighboring states (MN, SD, MT, WY) and 30 percent lived elsewhere in the United States (Table 4). The distribution of workforce residency was 60 percent North Dakota and 40 percent elsewhere (Figure 1). This distribution was compared to the sample of employees that participated in the workforce questionnaire to ensure a representative sample.

Table 4. Workforce Residency, Survey of Participating Firms, 2015

	Straight Average	Weighted Average
	-----percent-----	
Local Area	48.1	46.0
Elsewhere in ND	14.7	14.3
Neighboring States (MN, SD, MT, WY)	9.9	10.1
Elsewhere in the United States	29.9	29.7
(n)	(15)	(8,113)

Primary Residence of Employees, Participating Firm Questionnaire

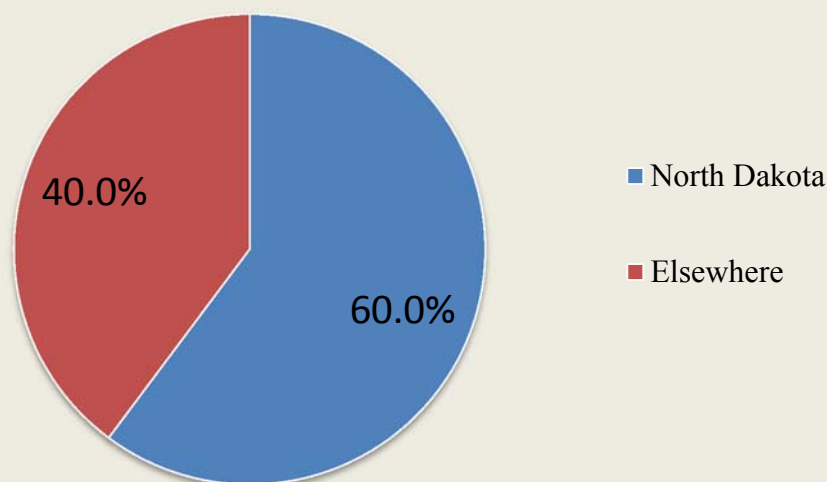


Figure 1.

Firms were also asked to report the percentage of their employees that worked in each of several defined workforce categories. Both a straight average of participating firm responses and a weighted average based on the participating firms' number of employees were calculated. There was little difference between the straight average and the weighted average indicating the results were not being influenced by one or two large firms. 'Field operations, 2 or more years of experience' made up the largest single category of workers, 22 percent for both the straight average and the weighted average (Table 5). All field operations ('less than two years' and '2 or more years' experience), represented just below 40 percent of the participating firm total workforce. Straight and weighted average for field operations regardless of level of experience was 39 and 37 percent, respectively. The percentage of the workforce dedicated to 'trucking and

transportation’ varied slightly between the straight and weighted average. Twenty percent of the weighted average workforce were ‘trucking and transportation’, while the straight average indicated 13 percent of the workforce was dedicated to ‘trucking and transportation’ (Table 5).

Table 5. Workforce Description, Survey of Participating Firms, 2015		
Item	Straight Average	Weighted Average
	-----percent-----	
Field operations, less than 2 years of experience	16.9	14.9
Field operations, 2 or more years of experience	22.4	22.3
Infrastructure construction such as roads, pipelines, municipal services, rail	2.5	1.3
Trucking, transportation	13.3	20.4
Professional services, such as engineering, accounting, management, geology	18.5	17.9
Office, clerical or administrative support staff	12.2	10.6
Field operations support such as mechanic, equipment maintenance	14.1	12.6
Residential or commercial building construction	0.0	0.0
(n)	(15)	(8,113)

Key Findings Participating Firm Survey

The responses provided by participating firms verified that their employees represented a cross section of workers with various job descriptions and various industry activities. The straight average and weighted average of various job descriptions suggests that one very large firm did not influence the distribution among participating firms. The results from the employer questionnaire will be used to determine the degree to which a representative sample of their workforce was obtained. Results from the employer questionnaire will help with analysis and interpretation of the data from the employee questionnaire.

A substantial portion of the workforce does not live in the local area where their job activities are located. Just under 50 percent of participating firms’ workforce live in the local area while 15 percent live elsewhere in North Dakota and 10 percent live in neighboring states. Thirty percent live elsewhere in the United States.

Survey of Workforce

Findings from the employee questionnaire are detailed in the sections below.

Job Description

Employees were asked what best describes their job. Respondents were given a choice between several categories of activities that were designed to differentiate between the broad range of oil and gas industry services and activities. Nearly 30 percent of respondents indicated their job description as ‘field operations, 2 or more years of experience’ (Table 6). Eight percent of respondents indicated their job was ‘field operations, less than 2 years of experience’. Twenty-four percent of respondents indicated their job description was ‘professional services’ and 16 percent were ‘office, clerical, administrative or support staff’. Twelve and 11 percent of respondents indicated their job description was ‘field operations support’ and ‘trucking and transportation’, respectively. Findings are detailed in Table 6.

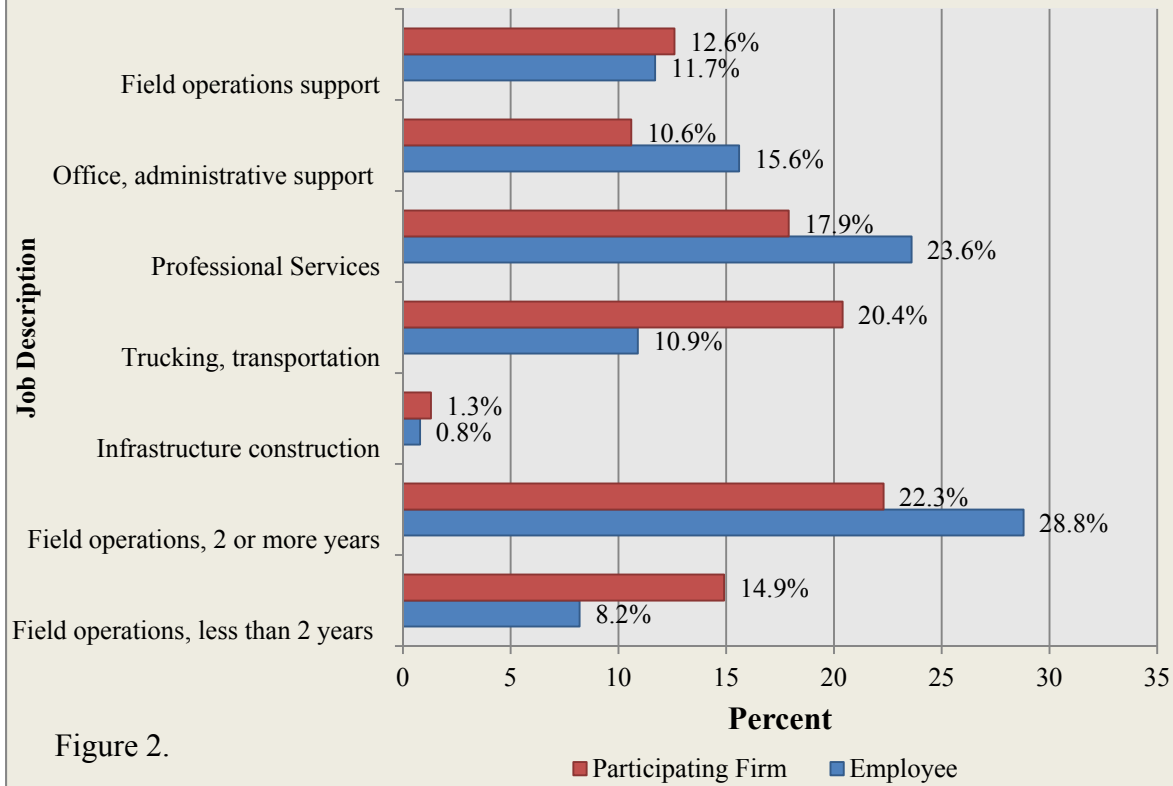
The percentage of the total for each job description is less significant than the number of observations in each job category. With the exception of ‘infrastructure support’ enough observations were collected to allow for comparisons between the job description categories and to make generalizations to the larger oil and gas industry workforce. A sufficient number of observations were collected to make inferences about the larger population at a 95 percent confidence interval with a 10 percent sampling error (Dillman, 2000).

Table 6. Job Description, Workforce Survey, 2015		
	Number	Percent
Field operations, less than 2 years of experience	136	8.2
Field operations, 2 or more years of experience	481	28.8
Infrastructure construction such as roads, pipelines, municipal services, rail	13	0.8
Trucking, transportation	181	10.9
Professional such as engineering, accounting, management, geology	394	23.6
Office, clerical, administrative or support staff	260	15.6
Field operations support such as mechanic or equipment maintenance	195	11.7
Residential or commercial building construction	0	0.0
Other ¹	8	0.5
Total	(1,668)	100.0
¹ Other: Respondents did not provide a description of their ‘other’ job description.		

Figure 2 illustrates how the distribution of the sample of respondents to the employee questionnaire aligns with the distribution of job descriptions as reported by participating firms. For some job categories the sample distribution from the employee questionnaire is very similar

to the actual distribution as reported by participating firms. Other job description categories were slightly over represented in the employee sample and other job description categories were slightly under represented. For the largest component of the workforce as reported by participating firms, 'field operations' the sample is approximately the same as the percent of the workforce as reported by participating firms, 30 and 37 percent respectively (Figure 2). The sample from the employee survey is slightly over represented by 'office, administrative support' and 'professional services'. Considering the survey instrument was administered on line, it is not unreasonable to expect a greater response rate from individuals with desk or office jobs compared to field operations. Alternately, 'trucking, transportation' segment was under represented in the employee questionnaire. Only 11 percent of respondents to the employee questionnaire indicated their job description was 'trucking, transportation'. Participating firms indicated 20 percent of their workforce had job descriptions related to 'trucking, transportation'. While the distributions are not identical, the overall the distribution of respondents by job description is similar to that reported by participating firms. More important than the distribution is the number of observations in the various job description categories. A sufficient number of observations were collected to make inferences by job descriptions at a 95 percent confidence interval with a 10 percent sampling error (Dillman, 2000).

Comparison of Distribution of Job Descriptions Participating Firm Survey, Workforce Survey



Primary Residency

Respondents were asked if their primary residence was in North Dakota. Seventy percent of respondents to the employee questionnaire indicated they were North Dakota residents (Table 7, Figure 3). As previously reported, participating firms reported that 60 percent of their workforce were North Dakota residents. Because North Dakota residents were slightly over represented in the employee questionnaire and because of the potential differences in characteristics, attitudes, and perceptions, between residents and non-resident, findings will be reported by residency and by all respondents.

Table 7. Percent of Respondents North Dakota is Primary Residence, Workforce Survey, 2015

	Number	Percent
Yes	1158	70.3
No	489	29.7
Total	(1,647)	100.0

Primary Residence of Respondents, Workforce Survey

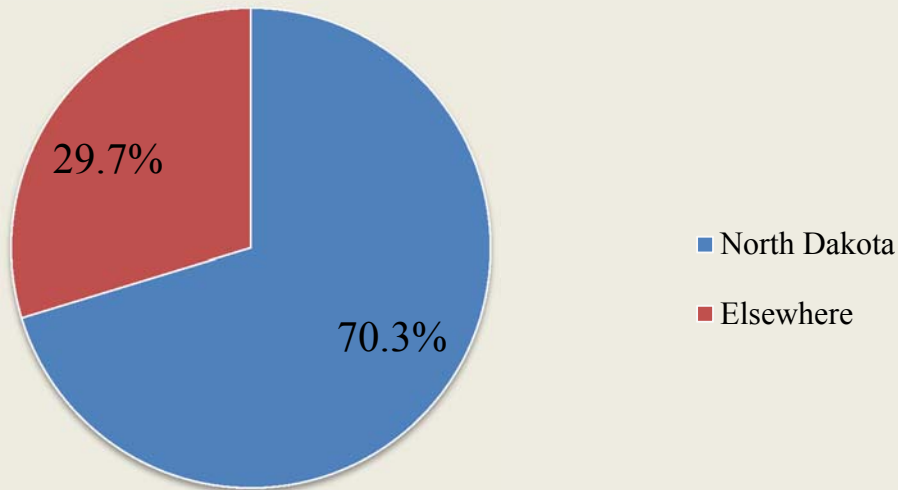


Figure 3.

Job Description by Residency

Job descriptions were analyzed by residency. Nearly 50 percent of respondents that live elsewhere indicated their job description were ‘field operations’ compared to just over 30 percent for North Dakota residents (Table 8). A greater percentage of respondents that live elsewhere indicated their job description was ‘trucking, transportation’, 18 percent compared to only 8 percent of respondents that live in North Dakota. A greater percentage of North Dakota residents indicated their job description was ‘professional services’ or ‘office, clerical or support staff’ than respondents that live elsewhere, nearly 50 percent compared to 16 percent, respectively. Findings are detailed in Table 8. The high percentage of residents that indicated their job description was ‘professional services’ or ‘office, clerical or support staff’ was likely influenced by the fact that those job categories were slightly over represented in the sample compared to the actual distribution reported by participating firms.

Table 8. Job Description, Workforce Survey, 2015		
	Primary Residence	
Item	North Dakota	Elsewhere
	-----percent-----	
Field operations, less than 2 years	5.6	14.3
Field operations, more than 2 years	26.5	34.4
Infrastructure construction, such as roads, pipeline, municipal services, rail	0.8	0.8
Trucking, transportation	7.9	17.6
Professional services such engineering, accounting, management, geology	28.2	12.5
Office, clerical, administrative or support staff	20.2	4.9
Field operations support such a mechanic, equipment, maintenance, safety	10.1	15.3
Other ¹	0.6	0.2
	(1,158)	(489)

Activities and Services Associated with Job Description

Activities and services associated with respondents' job description are detailed in Table 9 and Figure 4. North Dakota respondents most frequently indicated their job was associated with activities and services related to 'production and operations', 33 percent. Respondents that live elsewhere more frequently indicated the activities and services related to their job description were related to 'fracing and well completion services', 41 percent. Only 20 percent of North Dakota respondents indicated their job was associated with 'fracing and well completion services'.

A substantial portion of respondents, 10 percent, selected the category 'other'. Unfortunately, many of the 'other response' were a result of respondents not understanding the question. The intent of the question was to be able to categorize responses according to various industry activities. For example, a respondent may have indicated 'safety'. 'Safety' jobs can be associated with nearly any activity, drilling, fracing or production and operations. Accordingly, it was not possible to recode responses. The activities specified for all 'other' responses are detailed in Appendix A, Table A-1.

Table 9. Activities and Services Associated with Job Description, Workforce Employee Questionnaire, 2015

	Primary Residence	
	North Dakota	Elsewhere
	-----percent-----	
Infrastructure construction such as roads, pipelines, municipal services, rail	7.5	4.8
Drilling, wellsite preparations, geophysical services	14.2	14.0
Fracing and well completion services	20.8	41.4
Production and operations, including well maintenance and transportation	32.7	24.1
Natural gas processing	4.7	1.0
Rail and pipeline operations, gas and oil shipments	8.7	4.2
Other ¹	11.3	10.3
(n)	(1,561)	(601)

Activities and Services Related to Respondents Job, by Residency

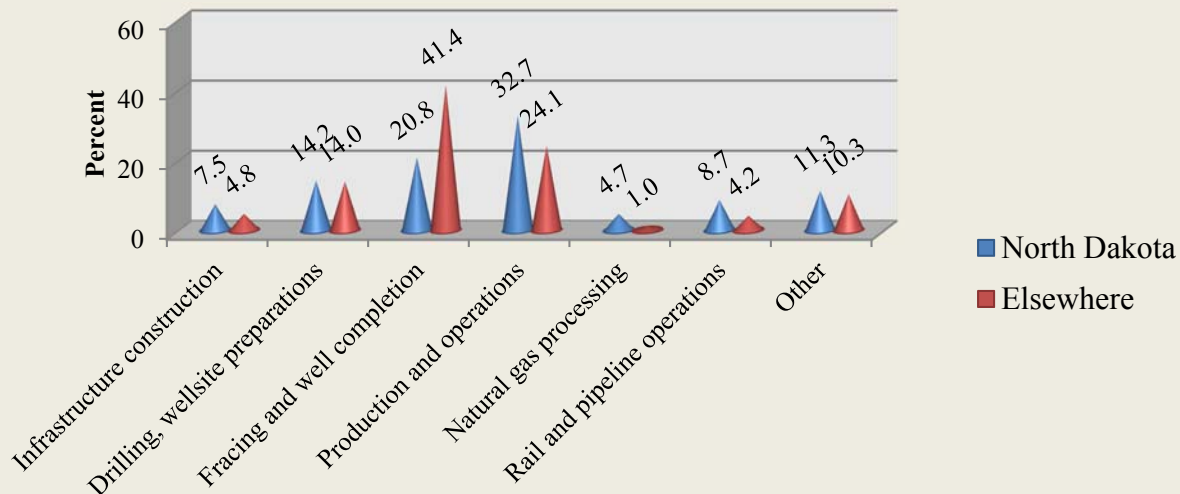
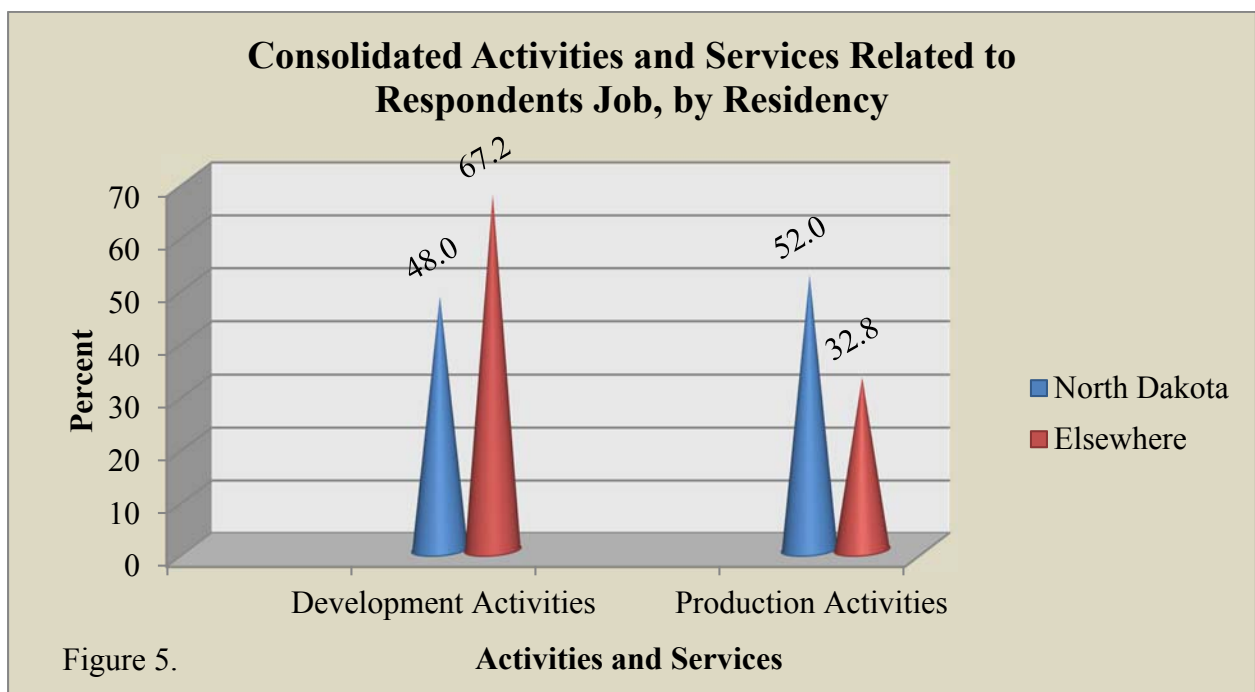


Figure 4.

Responses to the type of industry activities and services associated with respondent's job description were merged into two categories, activities associated with 'development' and activities associated with 'production/operations'. 'Infrastructure construction', 'drilling and wellsite preparation', and 'fracing and well completion' were combined to represent 'development activities' and 'production and operations', natural gas processing' and 'rail and

pipeline operations’ were combined to represent ‘production/operations activities. The consolation of activities highlighted differences in the activities and services related to the job descriptions of North Dakota respondents and respondents that live elsewhere. Two-thirds of respondents that live elsewhere indicated their jobs were associated with ‘development activities’ compared to only approximately half of North Dakota residents. One third of respondents that live elsewhere indicated their job was related to activities and services associated with ‘production/operation’ activities compared to just over 50 percent of respondents that live in North Dakota (Table 10 and Figure 5).

Table 10. Activities and Services Associated with Job Description, Workforce Survey, 2015 ¹		
Item	Primary Residence	
	North Dakota	Elsewhere
	-----percent-----	
Development Activities:		
Infrastructure construction; drilling, wellsite preparations, geophysical services; fracing, well completion services	48.0	67.2
Operations Activities:		
Production and operations, including well maintenance and transportation; natural gas processing; rail and pipeline operations, gas and oil shipments	52.0	32.8
(n)	(1,384)	(539)
¹ Respondents that indicated “Other” not included.		

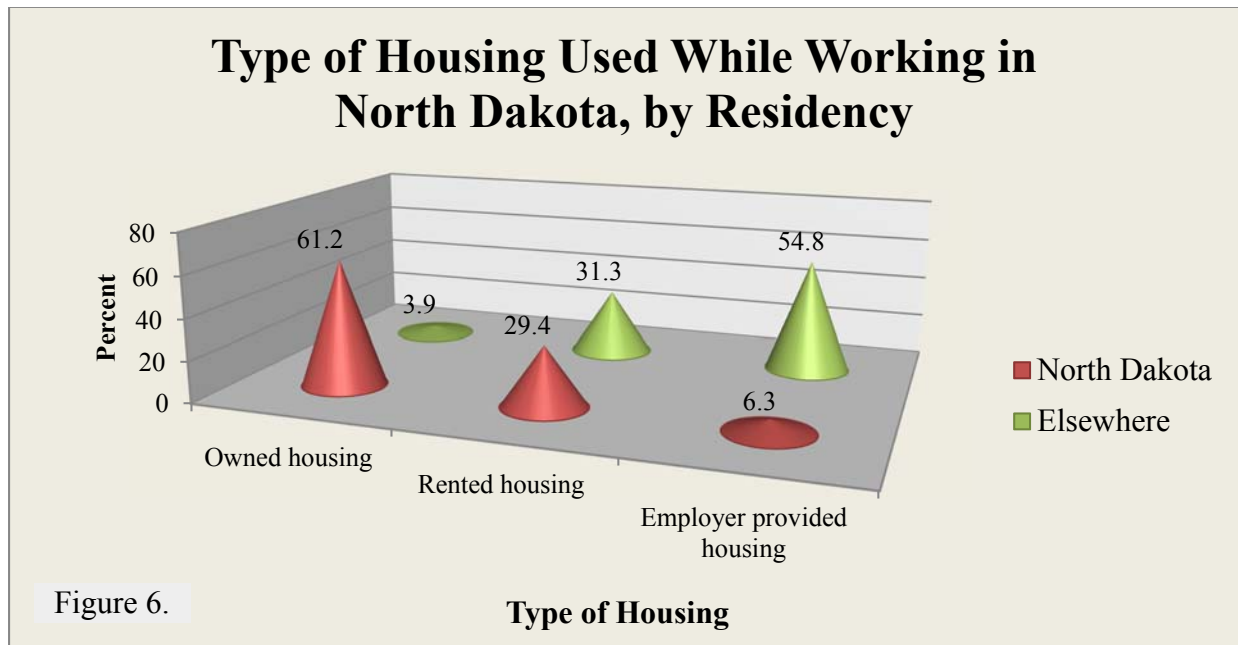


Current and Preferred Housing and Level of Satisfaction with Housing

The type of housing respondents used while working in North Dakota varied considerably based on respondent's residency. A majority of respondents that live in North Dakota live in housing that they own, 61 percent (Table 11). Thirty percent of respondents that live in North Dakota rent and only 6 percent live in housing provided by their employer (Table 11). Alternately 55 percent of non-resident respondents live in employer provided housing and only 4 percent own housing in North Dakota. Like North Dakota residents, 30 percent of non-resident workers rent housing while working in North Dakota (Table 11 and Figure 6).

Table 11. Type of Housing Used While Working in North Dakota, by Primary Residency, Workforce Survey, 2015

Item	Primary Residence		All respondents
	North Dakota	Elsewhere	
	-----percent-----		
Owned	61.2	3.9	44.2
Rented	29.4	31.3	30.0
Employer provided housing	6.3	54.8	20.7
Other ¹	3.0	10.0	5.1
(n)	(1,158)	(489)	(1,647)
¹ Live with a family member such as parents, uncle, in-laws; RV, 5 th wheel, truck or semi; live in Montana and commute; hotel; both rent and own, rent at work in ND and own elsewhere; company housing			



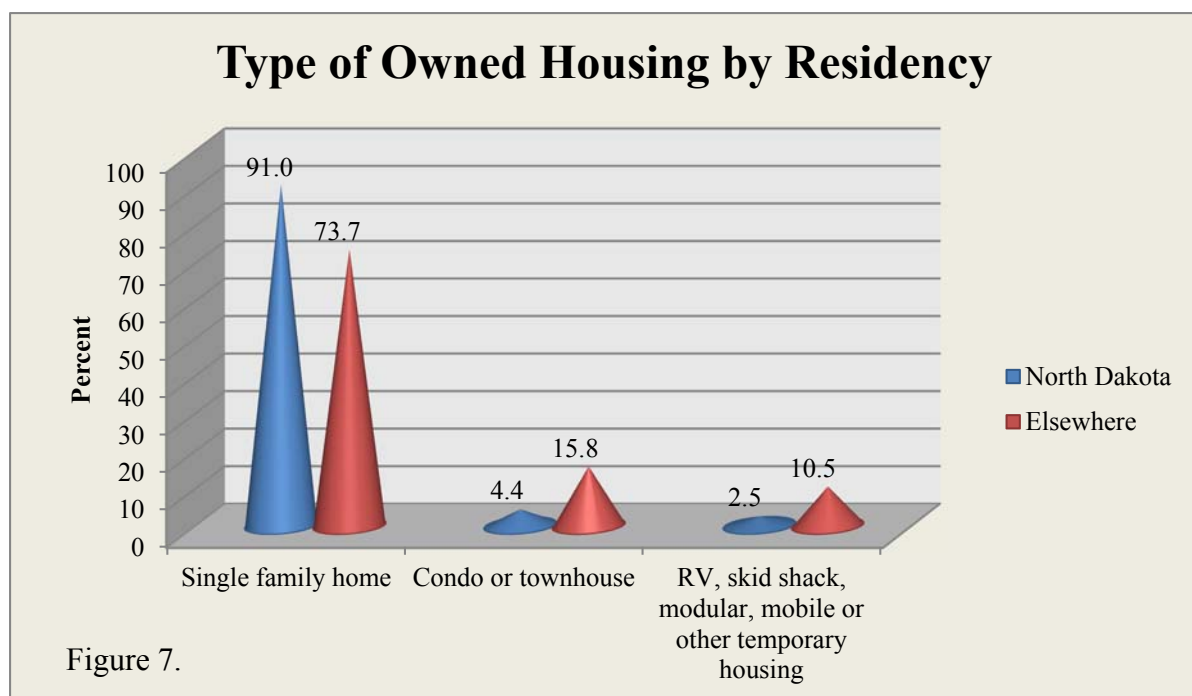
Owned Housing

Respondents that indicated they owned a home were asked what type of housing they own, (e.g., camper, mobile home, single family home). A vast majority of both respondents that live in North Dakota and respondents that live elsewhere that own homes, own single family homes, 91 and 74 percent, respectively (Table 12 and Figure 7). It is important to note that very few non-resident respondents indicated they own housing of any type. Only 19 of the 489 non-resident respondents own housing in North Dakota.

Table 12. Type of Housing Owned, by Primary Residence, Workforce Survey, 2015

Item	Primary Residence		All respondents
	North Dakota	Elsewhere	
	-----percent-----		
Single family home	91.0	73.7	90.5
Condo or townhouse	4.4	15.8	4.7
RV, skid shack, modular, mobile or other temporary housing	2.5	10.5	2.7
Other ¹	2.1	0.0	2.1
(n)	(709)	(19)	(728)

¹Other: Twin home, family home, farm zoned ag, mobile home, 4 Bedroom house, modular, single family home in Bismarck and mobile home in Stanley, commercial building, house.



Respondents that owned homes were asked if they would like to purchase or rent some other type of housing or if they would prefer to remain in their current housing. A majority of North Dakota respondents, 70 percent, indicated they were happy with their current housing, but nearly all the remaining respondents would prefer to buy some other type of housing (Table 13). The same was true for non-resident respondents. Nearly 60 percent were happy with the housing they currently own. Again it is worth noting that very few respondents that live elsewhere own housing in North Dakota. Because of the small number of observations from respondents that live elsewhere, caution should be exercised when interpreting those results. It may not be appropriate to generalize finding from this question for respondents that live elsewhere to the larger workforce population.

Less than 1 percent, which translates into only 6 respondents indicated they would prefer to rent some other type of housing in place of the housing they currently own. Data not shown for the type of housing respondents would prefer to rent in place of housing they own.

Table 13. Percent of Respondents that Currently Own Housing That Would Like to Purchase, Rent or Remain in Currently Owned Housing, by Residency, Workforce Survey, 2015

	Primary Residence		
Item	North Dakota	Elsewhere	All respondents
	-----percent-----		
Rent	0.7	5.3	0.8
Buy	28.6	36.8	28.8
Neither, I am happy with my housing	70.7	57.9	70.3
(n)	(709)	(19)	(728)

A large majority, 90 percent, of respondents that currently own a home that indicated they would like to purchase some other type of housing indicated they would like to purchase a single family home (Table 14). The same was true for respondents that live elsewhere, but again, very few respondents that live elsewhere own housing in North Dakota and even fewer would like to purchase some other type of housing in North Dakota (Table 14). Because of the small number of observations from respondents that live elsewhere, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings of this question for respondents that live elsewhere to the larger workforce population.

Table 14. Type of Housing Respondents Would Like to Purchase in Place of Current Owned Housing, by Residency, Respondents that Currently Own Housing, Workforce Survey, 2015

	Primary Residence		
Item	North Dakota	Elsewhere	All respondents
	-----percent-----		
Single family home	90.1	100.0	90.5
Townhouse or condo	3.9	0.0	3.8
RV, skid shack, modular, mobile or other temporary housing	0.5	0.0	0.5
(n)	(203)	(7)	(210)

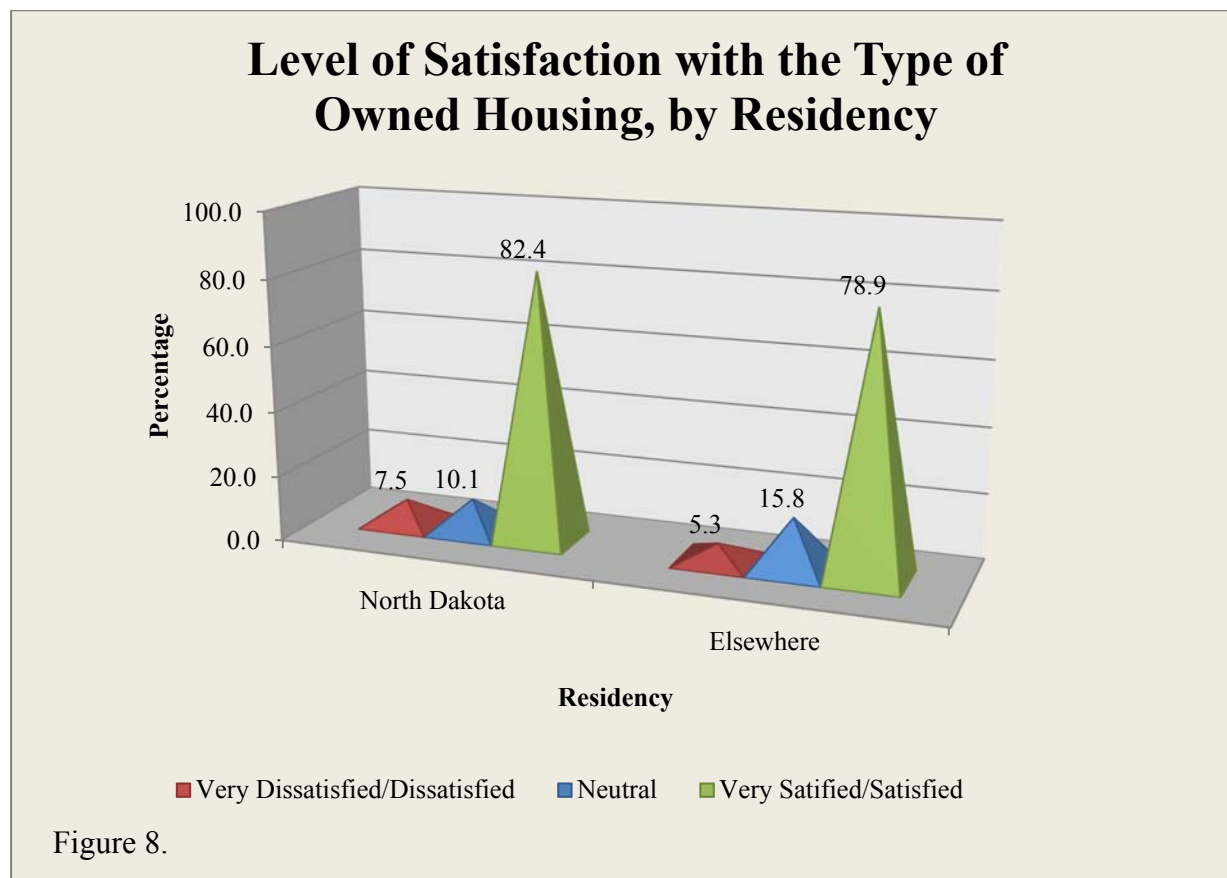
Respondents were asked to rate their level of satisfaction with the type, condition and cost of the housing they own in North Dakota. Responses are detailed in Table 15 and Figures 8-11. Overall a substantial majority of both respondents that live in North Dakota and respondents that live elsewhere were either ‘very satisfied’ or ‘satisfied’ with the type and condition of the housing they own in North Dakota. The level of satisfaction with the cost of their owned housing dropped substantially for both groups. Because of the small number of observations (19) from respondents that live elsewhere that own housing in North Dakota, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings from this question to the larger workforce population.

Table 15. Level of Satisfaction with the Type, Condition and Cost of Owned Housing in North Dakota, by Residency, Workforce Survey, 2015

	Type		Condition		Cost	
	Residency		Residency		Residency	
Item	North Dakota	Elsewhere	North Dakota	Elsewhere	North Dakota	Elsewhere
	-----percent-----					
Very Dissatisfied	3.8	5.3	4.0	5.3	15.9	26.3
Dissatisfied	3.7	0.0	6.8	5.3	25.2	26.3
Neutral	10.1	15.8	15.2	15.8	19.4	10.5
Satisfied	46.6	68.4	42.9	52.6	24.1	26.3
Very Satisfied	35.8	10.5	31.1	21.1	15.3	10.5
Average Score ¹	4.1	3.8	3.9	3.8	3.0	2.7
(n)	(706)	(19)	(704)	(19)	(705)	(19)

¹ Average score based on a 1 to 5 scale where 1 is very unsatisfied, 2 is unsatisfied, 3 is neutral, 4 is satisfied and 5 is very satisfied.

Seventy-nine percent of respondents that live elsewhere and 82 percent of respondents that live in North indicated they were either ‘very satisfied’ or ‘satisfied’ with the type of housing owned in North Dakota. Less than 10 percent of both North Dakota residents and respondents that live elsewhere were either ‘very dissatisfied’ or ‘dissatisfied’ with the type of housing they own in North Dakota (Figure 8).



Respondents were similarly satisfied with the condition of the housing they own in North Dakota. Seventy-four percent of both respondents that live in North Dakota and respondents that live elsewhere were either ‘very satisfied’ or ‘satisfied’ with the condition of the housing they own in North Dakota (Figure 9). Only 11 percent respondents in either residency group indicated they were either ‘very dissatisfied’ or ‘dissatisfied’ with the condition of the housing they own in North Dakota (Figure 9).

Level of Satisfaction with the Condition of Owned Housing, by Residency

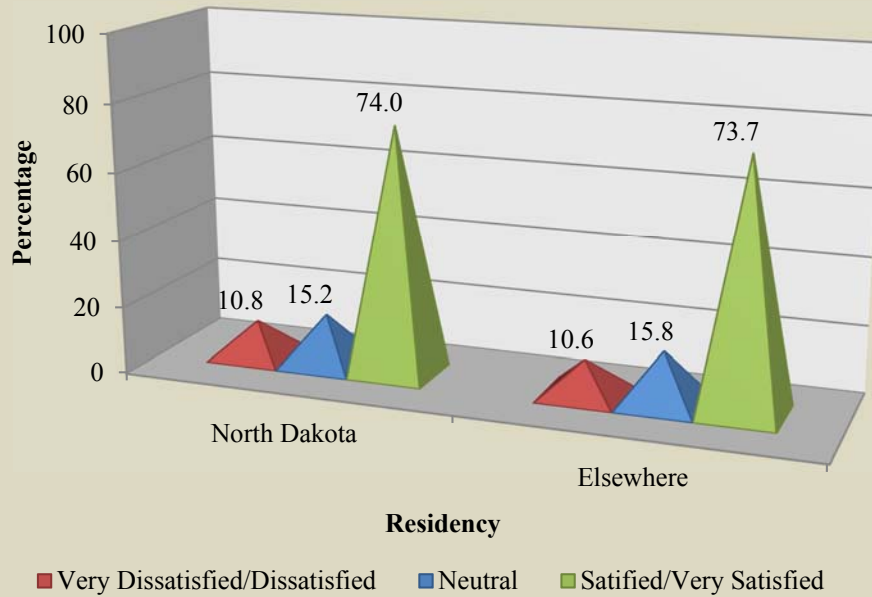


Figure 9.

While a majority of respondents were clearly satisfied with the type and condition of their homes that they own, that was not the case when asked about their level of satisfaction with the cost. Only thirty-nine percent of respondents that live in North Dakota and 37 percent of respondents that live elsewhere were either 'very satisfied' or 'satisfied' with the cost of the housing they owned in North Dakota (Figure 10). Forty-one percent of respondents that live in North Dakota and 53 percent of respondents that live elsewhere were either 'very dissatisfied' or 'dissatisfied' with the cost of the housing they own in North Dakota (Figure 10).

Level of Satisfaction with the Cost of Owned Housing, by Residency

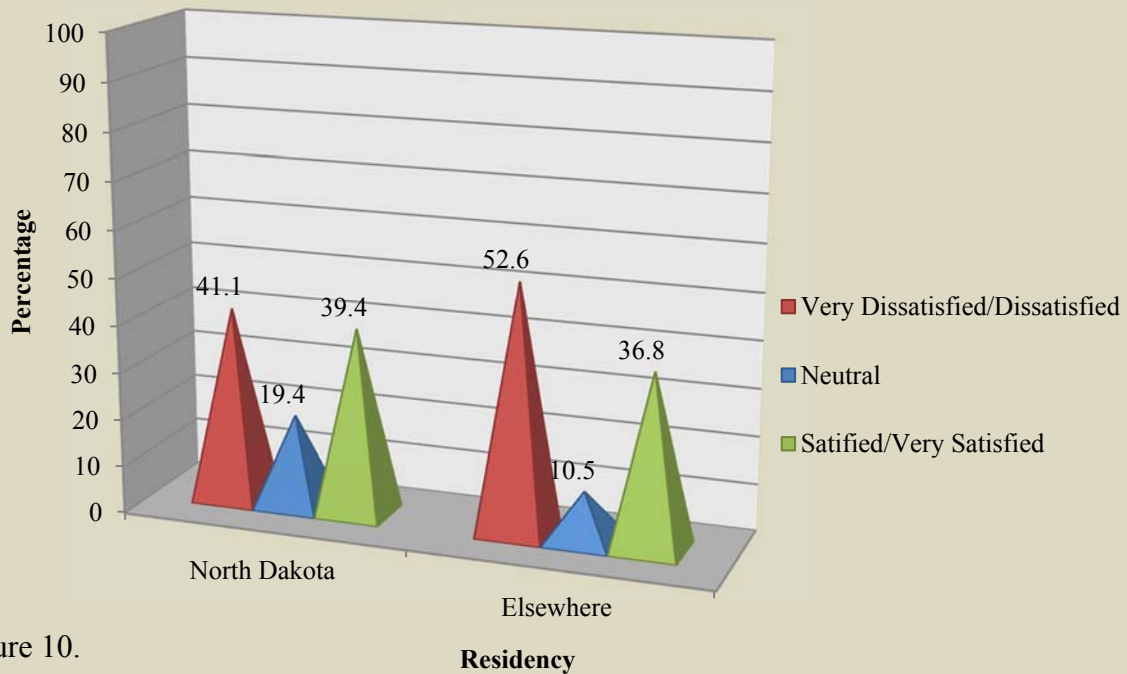


Figure 10.

An average score where 1 is 'very dissatisfied' and 5 is 'very satisfied' was calculated to compare the responses of respondents that live in North Dakota and respondents that live elsewhere on their level of satisfaction with the type, condition and cost of their owned housing in North Dakota. The average scores of approximately 4.0 for both groups reflect respondents' general satisfaction with the type and condition of their owned housing. The average score dropped considerably for both groups to 3.0 and 2.7 percent, indicating respondents were neither satisfied nor dissatisfied with the cost of their housing. There was no significant difference between the two groups for any of the three considerations (Table 15, Figure 11).

Level of Satisfaction with the Type, Condition and Cost of Owned Housing, By Residency



Figure 11.

¹ Average score where 1 is very dissatisfied, 2 is dissatisfied, 3 is neutral, 4 is satisfied and 5 is very satisfied.

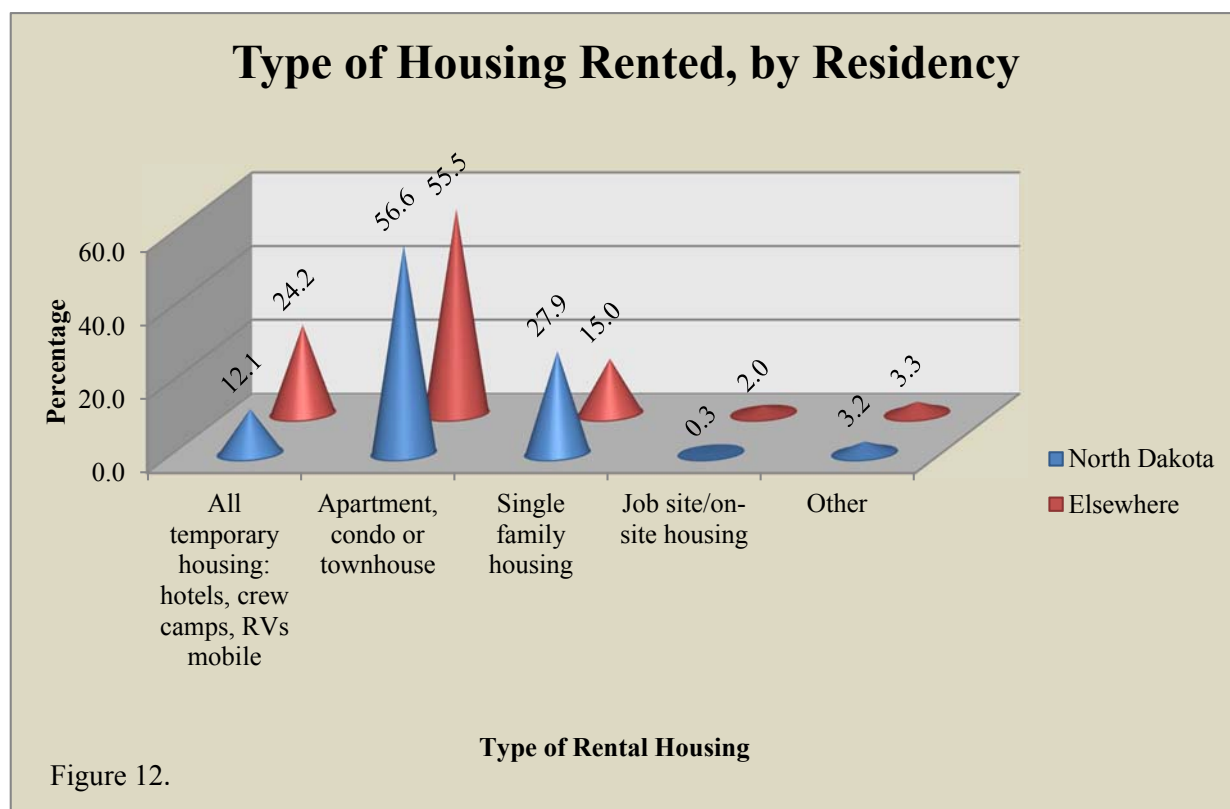
Rented Housing

The percentage of respondents that rent various types of housing is detailed in Table 16 and Figure 12. Just under half of the respondents in both groups indicated renting an ‘apartment, condo or townhouse’ in North Dakota. North Dakota residents more frequently rented a single family home. Nearly 30 percent of respondents that are North Dakota residents indicated renting a ‘single family home’ compared to only 15 percent of respondents that live elsewhere. Respondents that live elsewhere more frequently rented some type of non-traditional temporary housing. Twenty percent of respondents that live elsewhere rent some type of temporary housing (e.g., RV, camper, skid shack, modular or other temporary housing) compared to only 10 percent of North Dakota respondents (Table 16). An additional 5 percent of respondents that live elsewhere indicated renting at ‘crew camp’ and 2 percent indicated renting ‘job site/on-site housing’. Combining all types of temporary accommodations, 26 percent of respondents that live elsewhere rent some type of non-tradition temporary lodging compared to 12 percent for North Dakota residents (Table 16).

Table 16. Type of Housing Rented by Primary Residence, Workforce Survey, 2015			
	Primary Residence		
Item	North Dakota	Elsewhere	All respondents
	-----percent-----		
Apartment, condo or townhouse	46.0	49.0	47.0
Single family housing	27.9	15.0	23.9
RV, campers, skid shack, modular, mobile or other temporary housing	10.3	19.6	13.2
Condo or townhome	10.6	6.5	3.2
Crew camp	1.8	4.6	2.6
Job site/on-site housing	0.3	2.0	0.8
Hotel, motel or extended stay hotel	0.0	0.0	0.0
Other ¹	3.2	3.3	9.3
(n)	(341)	(153)	(494)
¹ Share House and Rent W/ another Mechanic; Basement Dwelling; small room; job site and single family; Company-owned apt.; One room in a house; share 4 bedroom town house company provided \$750 month; Home converted into duplex; Cabin rental; Regular house (3 bedroom) – rent; through the company; Apartment run by Halliburton; room; Duplex; Employer built home; Lot rent			

Responses were more evenly distributed when respondents were asked if they would like to purchase, rent or remain in the housing they currently rent (Table 17). Just over half of respondents that live in North Dakota and currently rent housing indicated they would like to purchase housing compared to only 30 percent of respondents that live elsewhere. Just over one third of respondents that live elsewhere and rent housing in North Dakota are happy with the housing that they currently rent compared to only 18 percent of respondents that live in North Dakota (Table 17).

Table 17. Percent of Respondents that Currently Rent Housing That Would Like to Purchase, Rent or Remain in Currently Rented Housing, by Residency, Workforce Survey, 2015			
	Primary Residence		
Item	North Dakota	Elsewhere	All respondents
	-----percent-----		
Rent	27.3	37.3	30.4
Buy	54.3	30.1	46.8
Neither, I am happy with my housing	18.5	32.7	22.9
(n)	(341)	(153)	(494)



Of those respondents that would like to rent some other type of housing in place of the housing they currently rent, 50 percent of respondents that live in North Dakota would like to rent a ‘single family home’ compared to 42 percent of respondents that live elsewhere (Table 18). Alternately 56 percent of respondents that live elsewhere would prefer to rent an ‘apartment’ or ‘condo or townhouse’ compared to 48 percent of respondents that live in North Dakota. Less than 2 percent of respondents in either group would prefer to rent some other type of temporary housing. Because of the small number of observations from respondents in both groups caution should be exercised when interpreting those results. It may not be appropriate to generalize findings from this question to the larger workforce population.

Table 18. Type of Housing Respondents Would Like to Rent in Place of Currently Rented Housing, by Residency, Workforce Survey, 2015

	Primary Residence		
Item	North Dakota	Elsewhere	All respondents
	-----percent-----		
Single family home	50.5	42.1	47.3
Apartment	28.0	50.9	36.7
Condo or townhouse	20.4	5.3	14.7
RV, skid shack, modular, mobile or other temporary housing	1.1	1.8	1.3
Hotel, motel or extended stay hotel	0.0	0.0	0.0
Crew camp	0.0	0.0	0.0
(n)	(93)	(57)	(150)

A large majority of respondents in both residency groups that currently rent but would like to purchase housing in place of currently rented property would like to purchase a single family home. Ninety-one percent of respondents that currently live in North Dakota, rent housing and would prefer to purchase housing would like to purchase a single family home. Eighty-two percent of respondents that live elsewhere, currently rent and would like to purchase housing, would like to purchase a single family home (Table 19). Because of the small number of observations from respondents that live elsewhere, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings from this question to the larger workforce population.

Table 19. Type of Housing Respondents Would Like to Purchase in Place of Current Rented Housing, by Residency, Workforce Survey, 2015

	Primary Residence		
Item	North Dakota	Elsewhere	All respondents
	-----percent-----		
Single family home	91.4	82.6	89.6
Condo or townhouse	5.6	8.7	6.5
Other ¹	1.1	8.7	2.6
RV, skid shack, modular, mobile or other temporary housing	1.6	0.0	1.3
(n)	(185)	(46)	(231)

¹Other: small hobby farm; Home in the country; Regular 4 bedroom with a nice yard and space for kids to play - needs to be at the right cost; single family home with little bit of land for animals; Small acreage; Single Family home or Townhouse; house with acreage

Respondents were asked to rate the level of satisfaction with the type, condition and cost of the housing they rent in North Dakota. As was the case with owned housing, respondents were generally satisfied with the type and condition of the housing they rent in North Dakota, but unsatisfied with the cost of the housing that they rent. Responses are detailed in Table 20 and Figures 13-16.

A majority of respondents in both residency groups were either ‘very satisfied’ or ‘satisfied’ with the housing they rent, 56 and 57 percent, respectively, for respondents that live in North Dakota and respondents that live elsewhere (Table 20). Approximately one quarter of respondents in both residency groups were ‘neutral’ regarding the type of housing they rent. Nineteen percent of respondents that live in North Dakota were either ‘very dissatisfied’ or ‘dissatisfied’ with the housing they rent compared to 14 percent of respondents that live elsewhere. Responses are detailed in Table 20 and Figures 13-16.

Table 20. Level of Satisfaction with the Type, Condition and Cost of Rented Housing in North Dakota, by Residency, Workforce Survey, 2015						
	Type		Condition		Cost	
	Residency		Residency		Residency	
Item	North Dakota	Elsewhere	North Dakota	Elsewhere	North Dakota	Elsewhere
	-----percent-----					
Very Dissatisfied	5.9	7.2	6.2	8.7	42.3	40.0
Dissatisfied	13.5	7.2	16.5	8.0	24.9	33.3
Neutral	25.0	28.8	21.5	25.3	12.4	14.8
Satisfied	36.8	42.5	37.5	42.7	13.0	6.7
Very Satisfied	18.8	14.4	18.3	15.3	7.4	5.3
Average Score ¹	3.5	3.5	3.5	3.5	2.2	2.0
(n)	(340)	(153)	(339)	(150)	(338)	(150)
¹ Average score based on a 1 to 5 scale where 1 is very unsatisfied, 2 is unsatisfied, 3 is neutral, 4 is satisfied and 5 is very satisfied.						

Level of Satisfaction with the Type of Rented Housing, by Residency

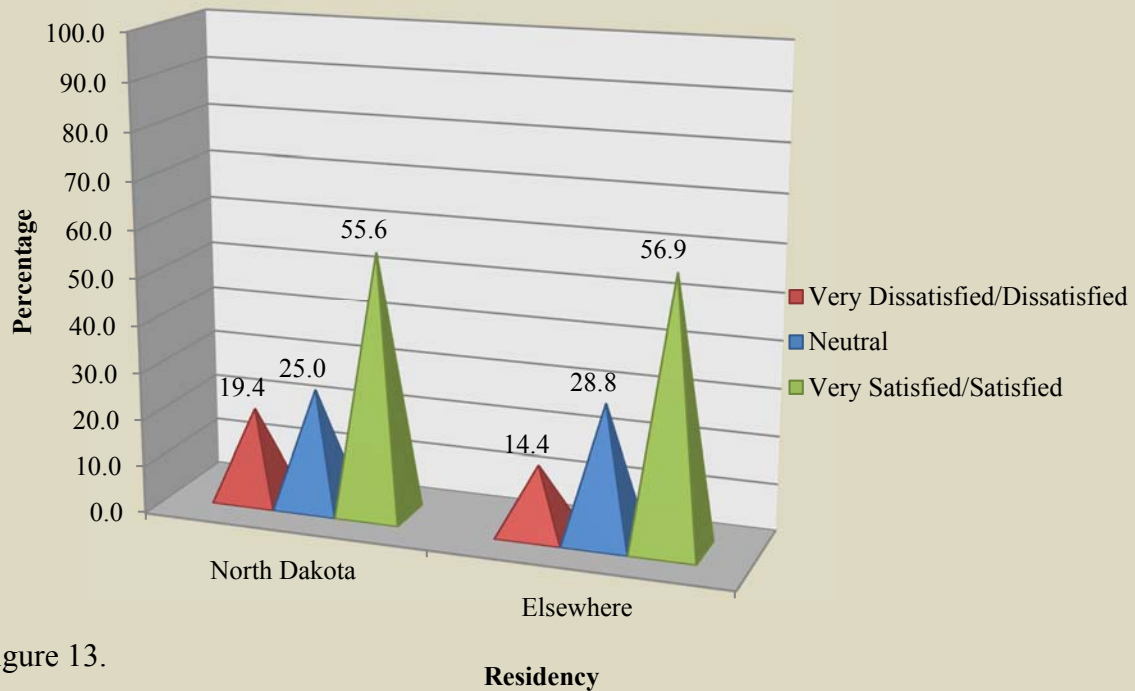
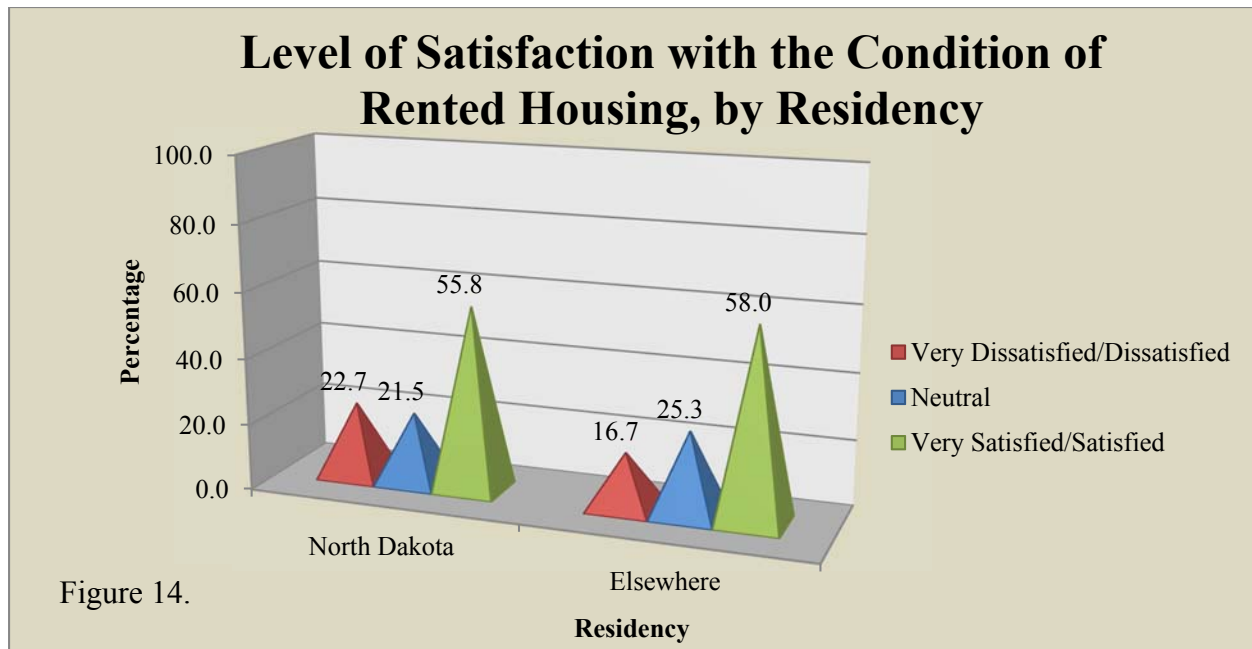


Figure 13.

Responses in both residency groups were similar when queried about the level of satisfaction with the condition of the housing they rent in North Dakota. Over 50 percent of respondents in both residency groups were either 'very satisfied' or 'satisfied' with the condition of the housing they rent. Respondents that live in North Dakota were more likely to be either 'very dissatisfied' or 'dissatisfied' with the condition of the housing they rent, 23 percent compared to 17 percent of respondents that live elsewhere (Table 20 and Figure 14).



A substantial majority of respondents in both residency groups were either ‘very dissatisfied’ or ‘dissatisfied’ with the cost of housing rented in North Dakota. Seventy-three percent of respondents that live elsewhere and 67 percent of respondents that live in North Dakota were either ‘very dissatisfied’ or ‘dissatisfied’ with the cost of their rented housing (Figure 15). Only 12 percent of respondents that live elsewhere were either ‘very satisfied’ or ‘satisfied’ with the cost of the housing they rent in North Dakota. Twenty percent of respondents that live in North Dakota were either ‘very satisfied’ or ‘satisfied’ with the cost of rented housing (Table 20 and Figure 15).

Level of Satisfaction with the Cost of Rented Housing, by Residency

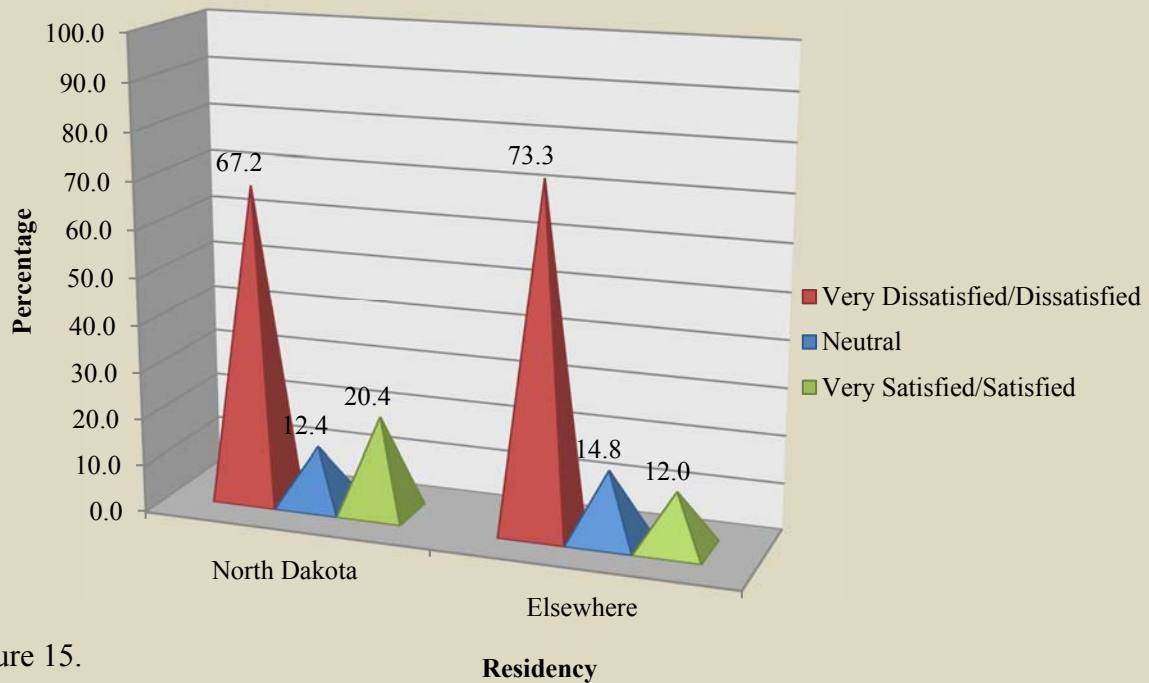


Figure 15.

An average score where 1 is 'very dissatisfied' and 5 is 'very satisfied' was calculated to compare the responses of respondents that live in North Dakota and respondents that live elsewhere level of satisfaction with the type, condition and cost of housing they rent in North Dakota (Table 20 and Figure 16). Both residency groups had an average score of 3.5 when rating their level of satisfaction the type and condition of the housing they rent in North Dakota. Indicating respondents were neutral, indicating they were neither satisfied nor dissatisfied with the type and condition of the housing they rent in North Dakota. Average scores dropped to 2.2 and 2.0, respectively for respondents that live in North Dakota and respondents that live elsewhere when asked about the level of satisfaction with the cost of the housing they rent in North Dakota, which indicates respondents were generally dissatisfied with the cost of the housing they rent in North Dakota. There was no significant difference in average scores between the two residency groups for type, condition or cost of rental housing (Table 20 and Figure 15).



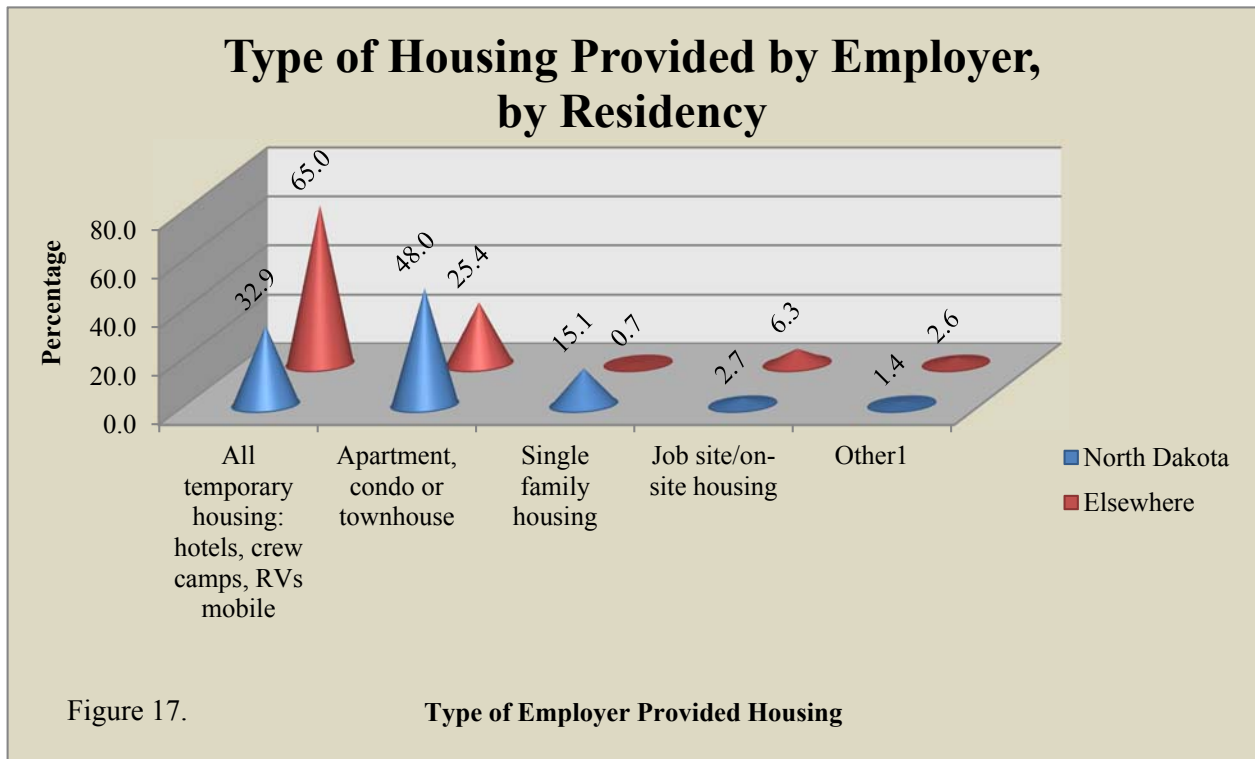
Employer Provided Housing

As reported earlier, respondents that live elsewhere most frequently reported living in employer-provided housing. Just over half of respondents that live elsewhere indicated they lived in housing provided by their employer compared to only 6 percent of respondents that live in North Dakota (Table 11 and Figure 6). In addition to substantial differences between the two groups in the frequency of employer provided housing, the type of employer provided housing varied by residency group as well. ‘Crew camps’ were the type of employer provided housing most frequently reported by respondents that live elsewhere, 53 percent compared to 21 percent for respondents that live in North Dakota (Table 21 and Figure 17). ‘Apartment’ or ‘condo or townhome’ were most frequently cited as the type of housing provided by employers for North Dakota residents. Nearly 50 percent of respondents from North Dakota indicated their employer-provided housing was either ‘apartment’ or ‘condo or townhome’ compared to 25 percent for respondents that live elsewhere. The ‘other’ category was predominately made up of respondents that reported some variation on the theme of living in their truck or truck sleeper berth. Single family housing was reported less frequently as the type of employer-provided housing by both groups, 15 percent for respondents that live in North Dakota and less than 1 percent for respondents that live elsewhere. Responses are detailed in Table 21 and Figure 17.

Table 21. Type of Housing Provided by Employer, by Primary Residency, Workforce Survey, 2015

Item	Primary Residence		All respondents
	North Dakota	Elsewhere	
	-----percent-----		
Crew camp	20.6	53.4	46.3
Apartment	27.4	18.3	20.2
Condo or townhome	20.6	7.1	10.0
RV, campers, skid shack, modular, mobile or other temporary housing	9.6	9.7	9.7
Job site/on-site housing	2.7	6.3	5.6
Single family housing	15.1	0.7	3.8
Other ¹	1.4	2.6	2.3
Hotel, motel or extended stay hotel	2.7	1.9	2.1
(n)	(73)	(268)	(341)

¹Other: truck sleeper berth; permanent trailer house; shared townhome; crew camp, condos, apartment; man camp; Live in my truck; Truck sleeper; live-in truck



Respondents were asked to rate the level of satisfaction with the type, condition and cost of the housing they rent in North Dakota. Responses are detailed in Table 22 and Figures 18-21. A substantial majority of respondents in both residency groups were either ‘very satisfied’ or ‘satisfied’ with the type of housing provided by their employer, 67 percent for respondents that live in North Dakota and 69 percent of respondents that live elsewhere. Respondents that live in North Dakota more frequently reported they were either ‘dissatisfied’ or ‘very dissatisfied’ with the type of housing provided by their employer compared to respondents that live elsewhere, 21 percent compared to 10 percent, respectively (Table 22 and Figure 18).

Table 22. Level of Satisfaction with the Type, Condition and Cost of Employer Provided Housing, by Primary Residency, Workforce Survey, 2015

	Type		Condition		Cost	
	Residency		Residency		Residency	
Item	North Dakota	Elsewhere	North Dakota	Elsewhere	North Dakota	Elsewhere
	-----percent-----					
Very Dissatisfied	11.0	4.9	6.8	5.3	12.3	11.6
Dissatisfied	9.6	5.6	9.6	8.3	11.0	9.7
Neutral	12.3	20.2	19.2	16.9	17.8	17.2
Satisfied	34.3	47.2	41.1	42.5	27.4	19.8
Very Satisfied	32.9	22.1	23.3	27.1	31.5	41.8
Average Score ¹	3.7	3.8	3.6	3.8	3.6	3.7
(n)	(73)	(267)	(73)	(266)	(73)	(268)
¹ Average score based on a 1 to 5 scale where 1 is very unsatisfied, 2 is unsatisfied, 3 is neutral, 4 is satisfied and 5 is very satisfied.						

Level of Satisfaction with the Type of Employer Provided Housing, by Residency

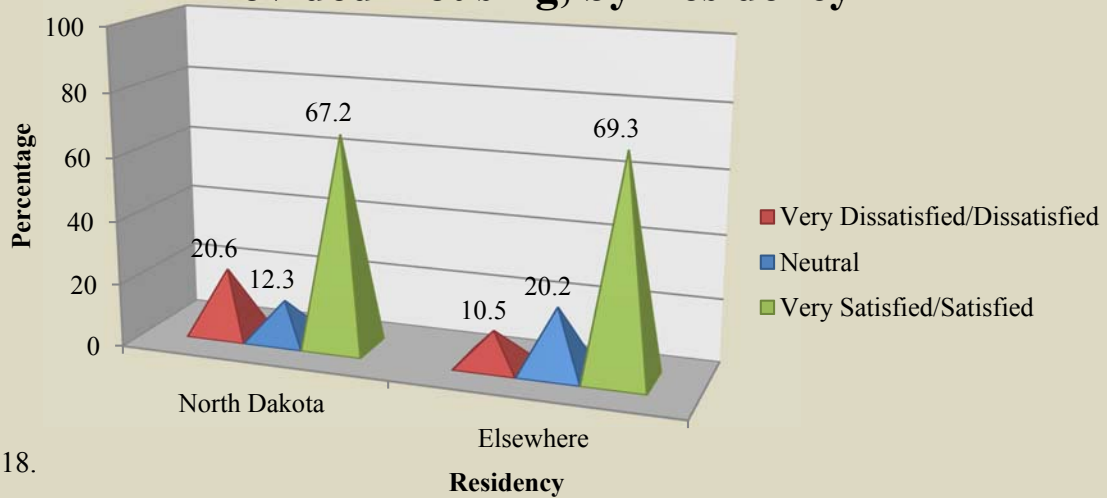


Figure 18.

Distributions were very similar for both residency groups regarding the level of satisfaction with the condition of the housing provided by their employer (Table 22 and Figure 19). A majority of respondents in both groups were either ‘very satisfied’ or ‘satisfied’ with the condition of their employer provided housing, 64 and 70 percent, respectively for respondents that live in North Dakota and those that live elsewhere. Sixteen percent of respondents that live in North Dakota and 14 percent of respondents that live elsewhere reported they were either ‘very dissatisfied’ or ‘dissatisfied’ with the condition of housing provided by their employer (Table 22 and Figure 19).

Level of Satisfaction with the Condition of Employer Provided Housing, by Residency

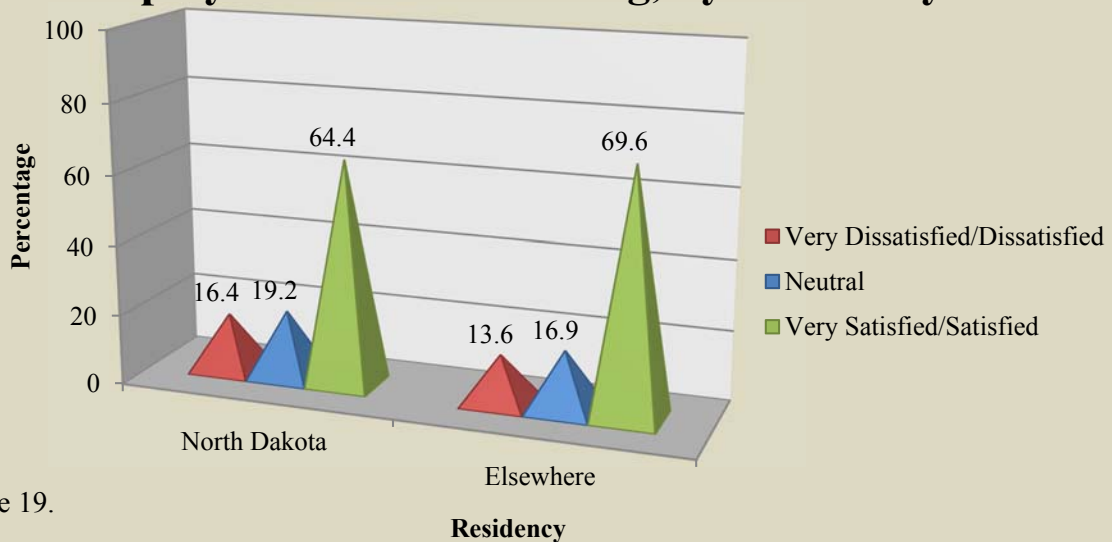
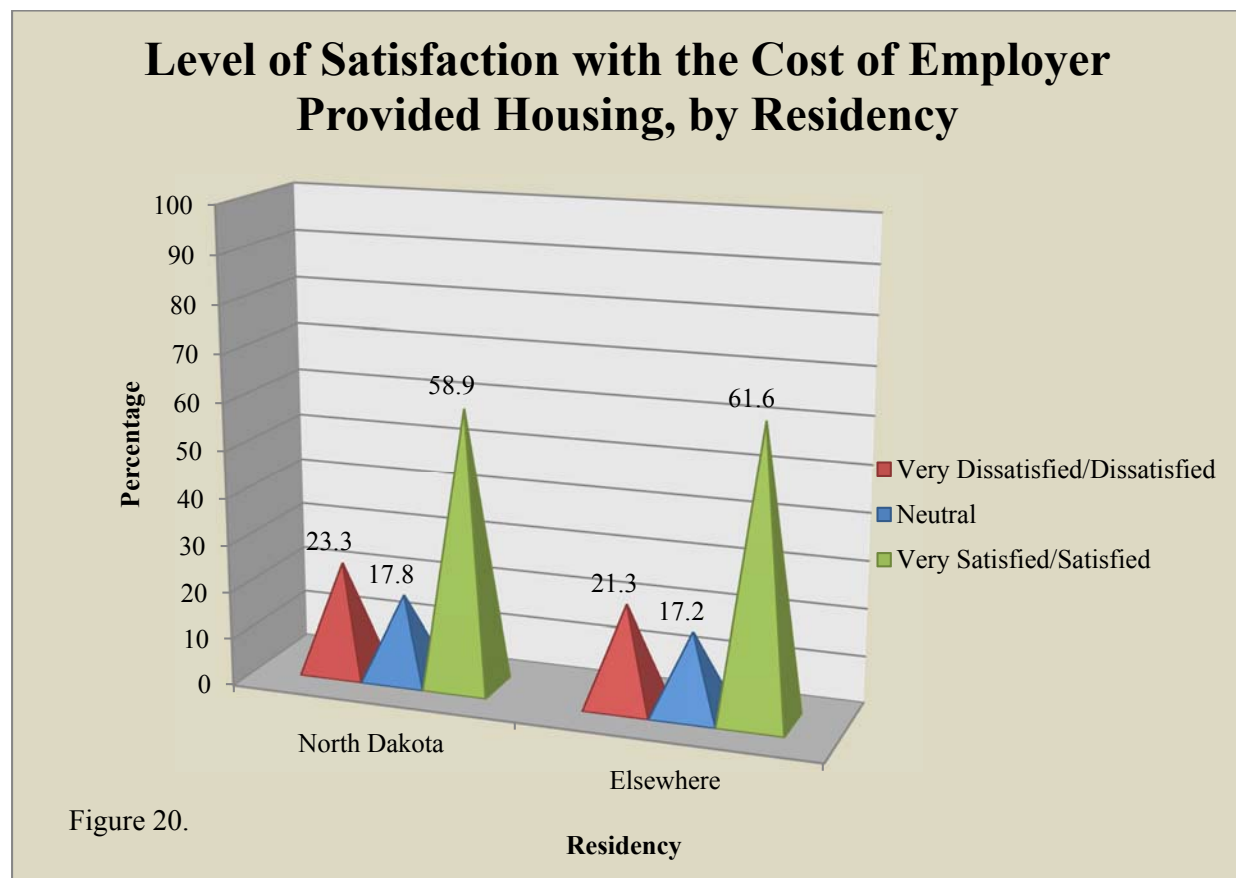
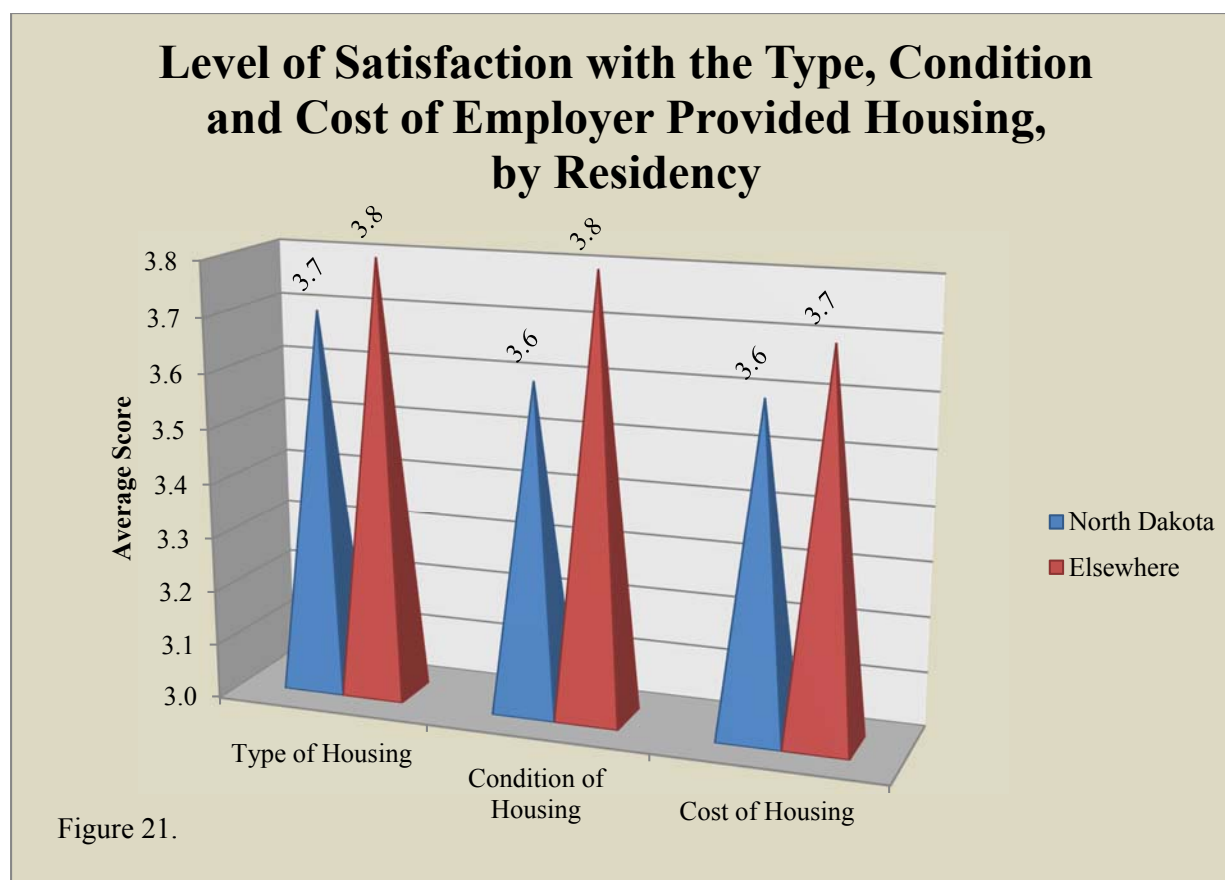


Figure 19.

Perhaps not surprising, a majority of respondents in both residency groups were either ‘very satisfied’ or ‘satisfied’ with the cost of their employer provided housing, 59 percent of respondents that live in North Dakota and 62 percent of respondents that live elsewhere (Table 22 and Figure 20). Alternately, 23 percent of respondents that live in North Dakota and 21 percent of respondents that live elsewhere were either ‘very dissatisfied’ or ‘dissatisfied’ with the cost the housing provided by their employer. It may seem counter intuitive that respondents would be dissatisfied with the cost of employer provided housing, however it is possible there may be some cost sharing or co-pay arrangements or requirements that may affect some respondents’ level of satisfaction with the cost of employer provided housing (Table 22 and Figure 20)



An average score where 1 is ‘very dissatisfied’ and 5 is ‘very satisfied’ was used to compare the responses of North Dakota residents and respondents that live elsewhere on the level of satisfaction with the type, condition and cost of employer provided housing. Average scores for both residency groups were nearly identical with no significant differences between the residency groups. Average scores ranged from 3.6 to 3.8 for the level of satisfaction with the type, condition and cost of employer provided housing (Table 22 and Figure 21).



Residency, and Residency Intentions and Quality of Life Considerations

As reported previously, 70 percent of survey respondents indicated their primary residence was in North Dakota and 30 percent indicated their primary residence was elsewhere (Table 7 and Figure 3). Based on the response to the question regarding residency, respondents that live in North Dakota were asked a series of questions related to quality of life considerations. Respondents that indicated their residency was elsewhere were asked a different series of question regarding their future intentions and whether various considerations would influence their intentions.

Non-resident Respondents: Residency Intentions and Considerations

The first question posed to non-resident respondents was “Would you like to move and make your primary residence in North Dakota?” A substantial majority, 81 percent, responded they did not want to move to North Dakota (Table 23, Figure 22). Only 19 percent of non-resident respondents indicated they would like to make their residence in North Dakota.

Table 23. If ND is Not Your Primary Residence, Would You Like to Move?, Workforce Survey, Respondents that Live Elsewhere, Would Like to Move to North Dakota, 2015

Item	-----percent-----
Yes	19.0
No	81.0
(n)	(486)

Percent Non-resident Respondents that Would Like to Move to North Dakota

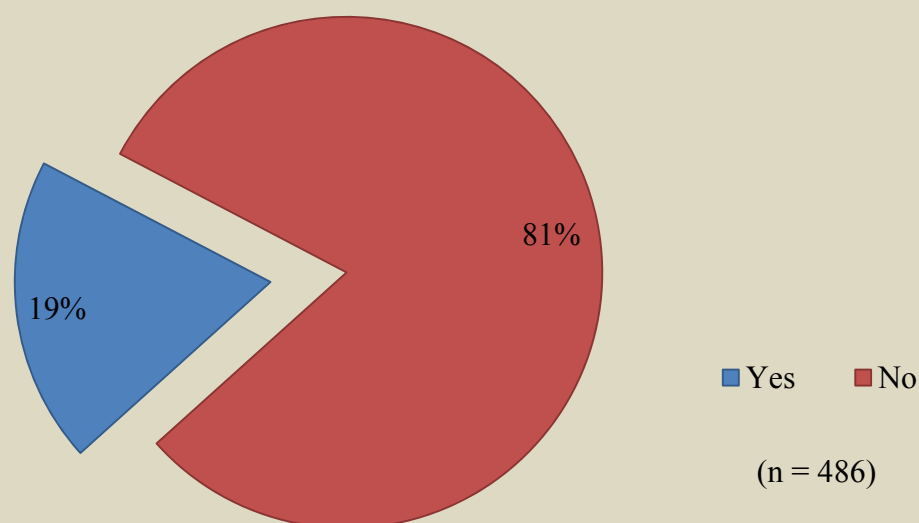


Figure 22.

Respondents that indicated they wanted to move to North Dakota were asked to rate on a 1 to 4 scale, where 1 is no influence, 2 is some influence, 3 is considerable influence and 4 is totally influenced, to what degree various factors affected their ability to move to North Dakota. Respondents most frequently indicated issues related to housing costs ‘totally influences’ their ability to move to North Dakota (Table 24 and Figure 23). Seventy-four percent of respondents indicated housing costs ‘housing is too expensive’, ‘totally influences’ their ability to move to North Dakota. Price risk also was a consideration. Sixty-seven percent of respondents indicated fear of a future drop in value of home as a consideration that ‘totally influences’ their ability to move to North Dakota (Table 24 and Figure 23). The average score for ‘housing is too

expensive’ was 3.59 on a 4-point scale. The average score for price risk related to a future decline in housing values was 2.97.

Respondents were more evenly split on to what degree lifestyle amenities such as recreation, entertainment or retail options affected their ability to move to North Dakota. Fifty-four percent of respondents that live elsewhere indicated ‘lifestyle amenities such as recreation, entertainment’ and ‘retail options’ had ‘no influence’ or ‘some influence’ while 46 percent indicated lack of the same lifestyle amenities had ‘considerable influence’ or ‘total influence’ (Table 24). Other considerations related to ‘not wanting to move away from friends or family’, ‘inability to access credit’, ‘potential for job transfer’, ‘cost, availability and adequacy of public schools and childcare’, ‘North Dakota is not a good place to raise a family’, ‘climate’ and ‘inability to sell current home’ all had average scores of less than 2.0 with at least 50 percent of respondents indicating those considerations had ‘no influence’ on their ability to move and make their primary residency in North Dakota. Responses are detailed in Table 24 and Figure 23.

Table 24. Degree that Various Factors Influence Non-resident Workers Ability to Move to North Dakota, Respondents That Want to Move to North Dakota, Workforce Survey, 2015

	No Influence	Some Influence	Considerable Influence	Totally Influences	Average Score	(n)
	-----percent-----					
Housing is too expensive.	3.3	8.7	14.1	73.9	3.59	(92)
I don't want to purchase a home because I am afraid the value will drop in the future.	14.1	16.3	28.3	41.3	2.97	(92)
The type of housing (apartment, townhouse, etc.) I want is not available.	28.3	17.4	31.5	22.8	2.49	(92)
Lack of lifestyle amenities such as recreation, entertainment and retail options.	31.5	22.8	28.3	17.4	2.32	(92)
I do not have a down payment for a house.	45.7	13.0	21.7	19.6	2.15	(92)
Lack access to or inadequate health care and public health services	41.8	25.3	18.7	14.3	2.05	(91)
Lack of social opportunities, no social life	40.2	28.3	19.6	12.0	2.03	(92)
My spouse and family do not want to move away from friends and family.	50.0	19.6	19.6	10.9	1.91	(92)
I cannot get a loan to buy a house. I do not have adequate credit to buy a house.	51.1	21.7	16.3	10.9	1.87	(92)
My employer could transfer me to another location.	52.8	23.1	9.9	14.3	1.86	(91)
Public schools and essential child care services such as day care are inadequate or unavailable or too expensive.	54.4	16.3	18.5	10.9	1.86	(92)
North Dakota is not a good place to raise a family.	59.3	17.6	14.3	8.8	1.73	(91)
Climate is too extreme, too cold.	57.6	27.2	10.9	4.4	1.62	(92)
I cannot sell my current home.	73.9	15.2	5.4	5.4	1.42	(92)
Other ²	27.8	0.0	5.5	66.7	3.11	(18)

¹Average score based on a 1 to 4 scale, where 1 is no influence, 2 is some influence, 3 is considerable influence and 4 is totally influence non-residents ability to move to North Dakota.

²Other: See Appendix Table A-1

Factors That Effect Non-resident Workers Ability to Make North Dakota Their Primary Residence, Respondents That Would Like to Move

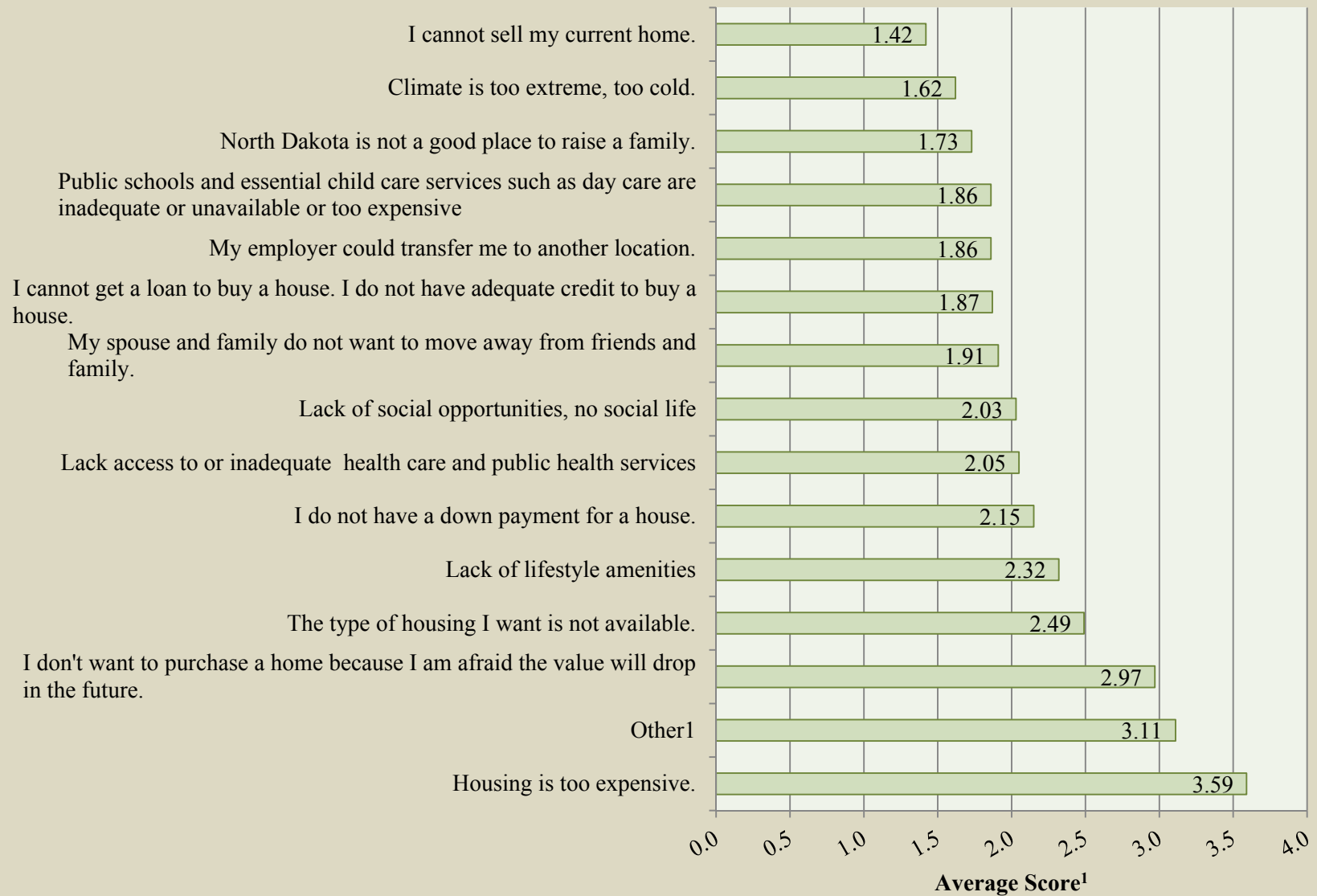


Figure 23.

¹Average score where 1 is no influence, 2 is some influence, 3 is considerable influence, 4 is totally influences

Respondents that indicated their primary residence is elsewhere and they *do not* want to move to North Dakota were also asked to rate the degree to which various considerations influenced their decision to *not* move to North Dakota. Respondents that indicated they do not want to move to North Dakota were asked to rate on a 1 to 4 scale where 1 is no influence, 2 is some influence, 3 is considerable influence and 4 is totally influenced to what degree various factors affected their ability to move to North Dakota.

Housing costs were also a key consideration for respondents that indicated they do not want to move to North Dakota. When asked to what degree housing cost influenced their decision, 50 percent of respondents indicated housing costs ‘totally influences’ their decision to not move to North Dakota and 75 percent indicated housing cost ‘totally influences’ or has ‘considerable influence’ (Table 25). ‘Not wanting to move away from friends or family’ either had ‘considerable influence’ or ‘totally influences’ 61 percent of respondents that do not want to move to North Dakota. Over 50 percent of respondents indicated a ‘drop in the future value of homes’ and ‘lack of lifestyle amenities such as recreation, entertainment and retail outlets’ as factors that have ‘considerable influence’ or ‘totally influences’ their decision to not move to North Dakota. A majority of respondents (60 to 70 percent) indicated ‘lack of social opportunities’, ‘climate is too cold’, ‘only plan on working North Dakota for a short time’, ‘type of housing not available’, and ‘my employer could transfer me’ had either ‘no influence’ or ‘some influence’ on their intension to not move to North Dakota. The factors that least influenced respondents’ decision to not move to North Dakota were ‘North Dakota is not a good place to raise a family’ or that ‘public schools and essential child care services are inadequate, unavailable or too expensive’. Sixty-two and 71 percent of respondents, indicated those considerations had ‘no influence’ on their decision to not move to North Dakota. Findings are detailed in Table 25 and Figure 24.

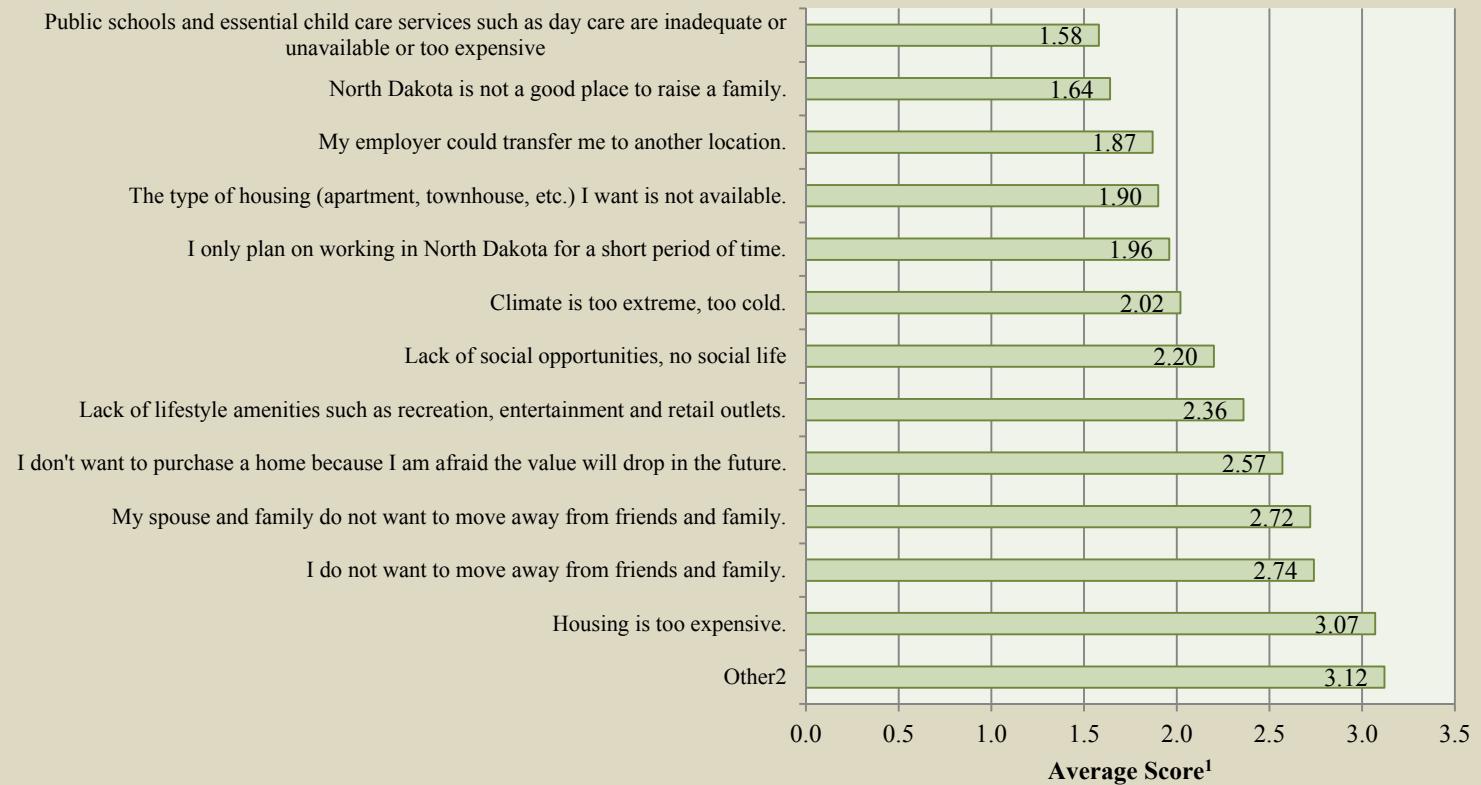
Table 25. Degree that Various Factors Influence Non-resident Workers Decision to NOT Move to North Dakota, Respondents That Do Not Want to Move to North Dakota, Workforce Survey, 2015

Item	No Influence	Some Influence	Considerabl e Influence	Totally Influences	Average Score ¹	(n)
	-----percent-----					
Housing is too expensive.	17.8	7.3	24.7	50.1	3.07	(381)
I do not want to move away from friends and family.	23.7	14.7	25.8	35.8	2.74	(380)
My spouse and family do not want to move away from friends and family.	28.2	10.8	22.4	38.7	2.72	(380)
I don't want to purchase a home because I am afraid the value will drop in the future.	31.5	13.2	22.5	32.8	2.57	(378)
Lack of lifestyle amenities such as recreation, entertainment and retail outlets.	31.2	24.9	20.9	23.0	2.36	(378)
Lack of social opportunities, no social life	36.7	24.2	21.0	18.1	2.20	(376)
Climate is too extreme, too cold.	44.7	23.4	15.3	15.6	2.02	(378)
I only plan on working in North Dakota for a short period of time.	48.9	21.3	15.0	14.7	1.96	(380)
The type of housing (apartment, townhouse, etc.) I want is not available.	51.6	20.1	15.1	13.2	1.90	(378)
My employer could transfer me to another location.	52.0	19.6	17.5	10.9	1.87	(377)
North Dakota is not a good place to raise a family.	62.0	19.8	10.2	8.0	1.64	(374)
Public schools and essential child care services such as day care are inadequate or unavailable or too expensive	71.4	9.0	9.3	10.3	1.58	(378)
Other ²	19.7	4.2	20.0	56.2	3.12	(96)

¹ Average score based on a 1 to 4 scale, where 1 is no influence, 2 is some influence, 3 is considerable influence and 4 is totally influence non-residents ability to move to North Dakota.

²Other: See Appendix Table A-2

Degree Various Factors Influence Respondents Decision to NOT Move to North Dakota



¹Average score where 1 is no influence, 2 is some influence, 3 is considerable influence, 4 is totally influences.

²See Appendix Table A-2 for list of 'other' factors identified by respondents.

Figure 24.

A comparison of the average scores of respondents *that want* to move to North Dakota with the average scores of respondents that *do not* want to move to North Dakota reveals some similarities and differences in perceptions between the two groups (Table 25). Cost of housing considerations were forefront for both groups, however more so for those respondents that would like to move to North Dakota. The average score for ‘housing is too expensive’ for respondents that would like to move to North Dakota was 3.59 compared to 3.07 for those respondents that *do not* want to move to North Dakota (Figure 25).

‘My spouse and family do not want to move away from friends and family’ was more of an influence for respondents that do not want to move to North Dakota with an average score of 2.72 compared to an average score of 1.91 for respondents that want to move to North Dakota. “Climate is too extreme, too cold” was also more of a factor for respondents that do not want to move to North Dakota. Thirty percent of those that do not want to move to North Dakota indicated ‘climate is too extreme, too cold’ totally influenced their decision to not move to North Dakota compared to only 15 percent of respondents that want to move to North Dakota (Table 24, Table 25). Average scores for ‘climate is too cold’ were 2.02 for those that do not want to move to North Dakota compared to 1.62 for those that want to move to North Dakota which indicates the climate is not a major influence on their decision or intentions (Figure 26).

Considerations related to lifestyle amenities, social opportunities, public schools and the potential for job transfer did not appear to be a major factor influencing respondents’ decision to or ability to move to North Dakota. ‘North Dakota is not a good place to raise children’, ‘public schools and essential child care services are inadequate, unavailable or too expensive’, or ‘employer could transfer me’ had average scores of 2.2 or less for both respondents that wanted to move to North Dakota and those that do not want to move to North Dakota (Figure 26).

Factors That Influence Respondents That Live Elsewhere Decision to Move to North Dakota

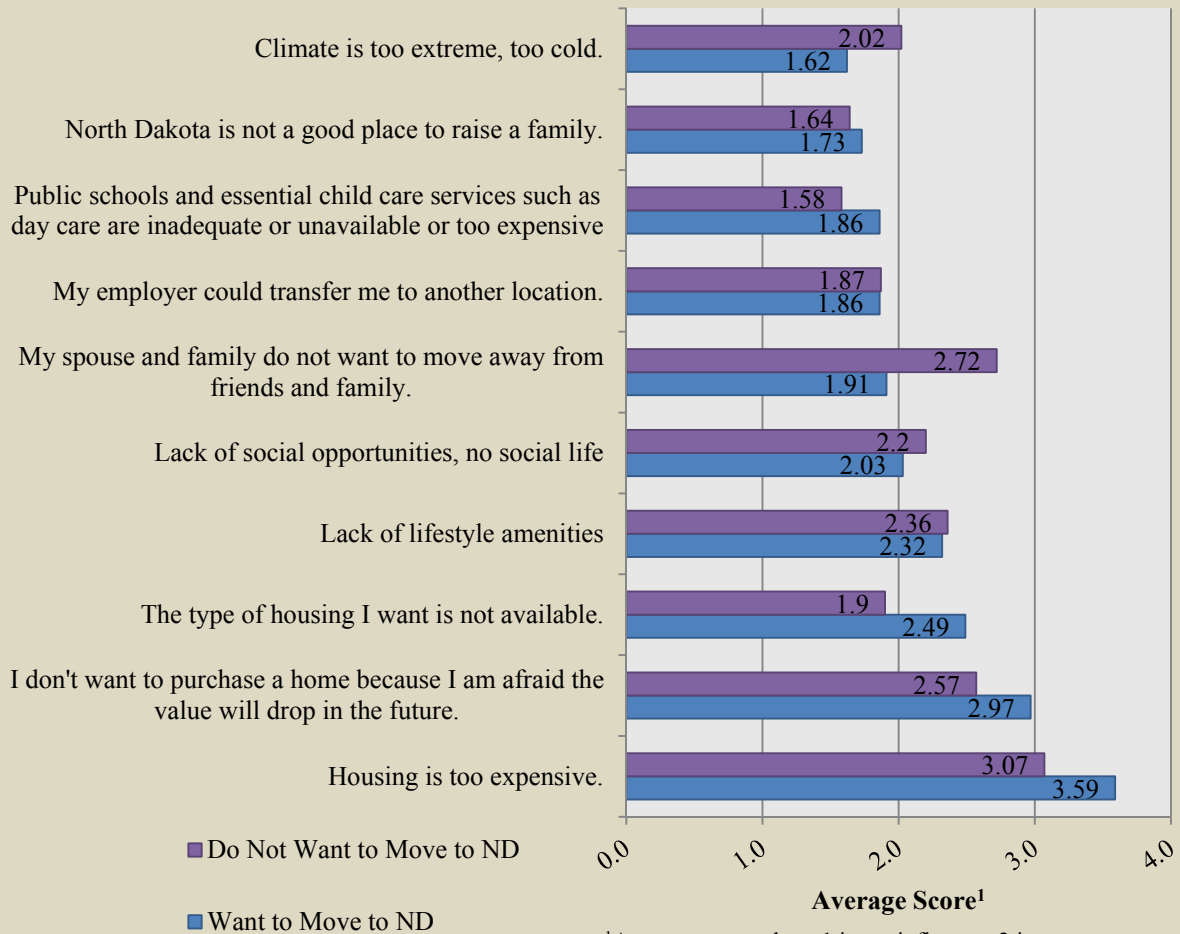


Figure 25.

¹ Average score where 1 is no influence, 2 is some influence, 3 is considerable influence, 4 is totally influences.

North Dakota Residents

Respondents that indicated they were North Dakota residents were asked to rate the importance of various quality of life considerations on a 1 to 5 scale where 1 is 'least important' and 5 is 'most important'. Not surprising most of the quality of life considerations received high rankings. 'Public safety, crime prevention', 'cost of living', 'affordable housing', and 'health care systems' topped the list with average scores over 4.0 (Table 26). Nearly 50 percent or more of respondents indicated those considerations were the 'most important' quality of life considerations. 'Quality school systems', 'recreation and entertainment opportunities', 'shopping and dining options' and 'traffic and congestion' had high average scores with average

scores that ranged from 3.55 to 3.87. ‘Childcare services’ and ‘arts, theater, cultural activities’ were the only considerations with average scores of less than 3.0. Respondent wrote in quite a few other quality of life considerations under the option for ‘other’. A full listing of other quality of life issues identified by respondents can be found in Appendix Table A-3. Findings are detailed in Table 26 and Figure 26.

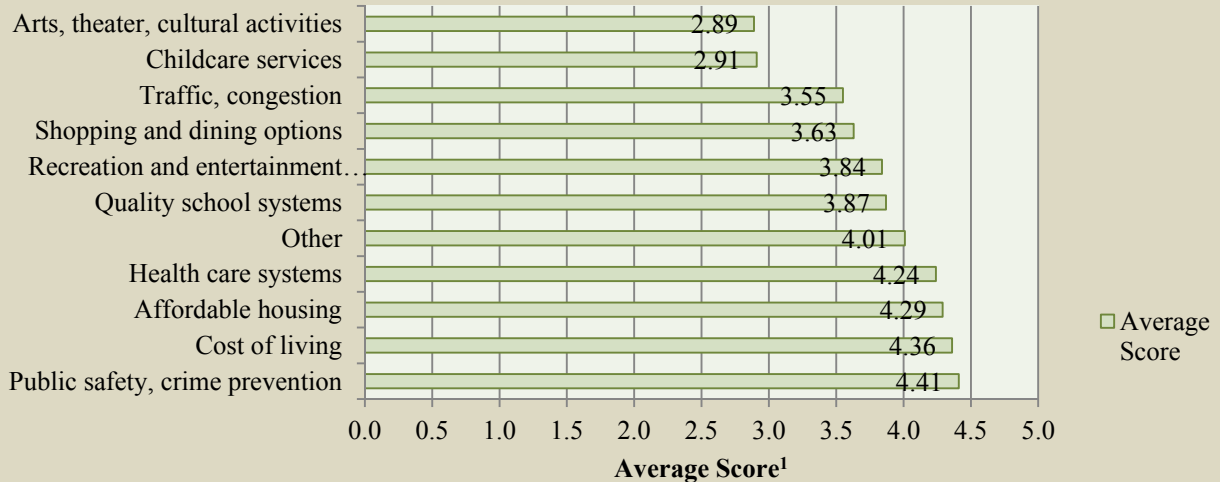
Table 26. Importance of Various Quality of Life Considerations, North Dakota Residents, Workforce Survey, 2014¹

Item	Least Important	2	Neither/ Neutral	3	Most Important	Average Score	(n)
	-----percent-----						
Public safety, crime prevention	1.1	1.6	8.9	32.3	56.1	4.41	(1,147)
Cost of living	0.4	1.6	13.4	31.1	53.5	4.36	(1,143)
Affordable housing	1.7	2.4	13.8	29.2	52.9	4.29	(1,148)
Health care systems	1.1	2.2	13.4	38.3	45.0	4.24	(1,149)
Quality school systems	11.3	5.7	13.3	23.9	45.8	3.87	(1,144)
Recreation and entertainment	2.1	5.7	24.9	40.6	26.7	3.84	(1,148)
Shopping and dining options	2.6	7.5	31.3	40.9	17.6	3.63	(1,146)
Traffic, congestion	4.4	10.2	32.3	32.3	20.7	3.55	(1,147)
Childcare services	29.2	11.4	19.5	19.1	20.7	2.91	(1,139)
Arts, theater, cultural activities	15.5	18.6	35.4	23.1	7.5	2.89	(1,145)
Other ¹	8.2	1.4	6.2	26.1	58.9	4.01	(146)

¹Other: See Appendix Table A-3.

¹Average score where 1 is least important and 5 is most important.

Average Score of Various Quality of Life Consideration, North Dakota Residents, Employee Questionnaire



¹Average score where 1 is no influence, 2 is some influence, 3 is considerable influence, 4 is totally influences.

Figure 26.

Length of Residency, Commuting Pattern and Intentions to Live or Work in North Dakota

A majority of respondents that indicated they were North Dakota residents have lived in the state for more than four years. Only 10 percent have lived in the state for less than one year and nearly 15 percent have lived 1 to 2 years or 3 to 4 years in North Dakota (Table 27).

Table 27. Length of Residency, Respondents that are North Dakota Residents, Workforce Survey, 2015

Item	-----percent-----
Less than one year	10.8
1 to 2 years	14.1
3 to 4 years	14.0
More than 4 years	61.1
(n)	(1,156)

A majority of respondents that are North Dakota residents work in or near the community they live. Eighty percent of North Dakota respondents indicated they work in or within 30 minutes of the community they live (Table 28). Of those that live more than 30 minutes from where they work, 62 percent live 31 to 90 miles from where they work. Twenty-four percent live 91 to 150 miles and 13 percent live more than 150 miles from where they work (Table 28).

Table 28. Commuting Patterns, Respondent That Live in North Dakota, Workforce Survey, 2015	
Item	-----percent-----
Do you work in or near (within 30 minutes) the community you live?	
Yes	79.0
No	21.0
(n)	(1,156)
If no, how far do you live from where you work?	-----percent-----
31 to 90 miles	62.4
91 to 120 miles	15.3
121 to 150 miles	9.1
More than 150 miles	13.2
(n)	(242)

Length of time respondents have been employed in the Williston Basin and employed in their current job is consistent and similar to the length of time respondents have been residents in North Dakota. Sixty-two percent of respondents that live in North Dakota have worked in the Williston Basin for more than 3 years (Table 29). Respondents that live elsewhere had a more even distribution in the length of time employed in the Williston Basin. Only 40 percent of respondents that live elsewhere had worked in the Williston Basin for more than 3 years (Table 29). Forty-three percent of residents that live elsewhere have worked in the Williston Basin for 2 years or less with nearly 26 percent that have worked in the Williston Basin for less than 1 year. Only 12 percent of respondents from North Dakota had been employed in the Williston Basin for less than 1 year.

Fewer than 50 percent of respondents that are North Dakota residents have been employed in their current job for more than 3 years (Table 29). Just over a third of respondents that are North Dakota residents (37 percent) were relatively new in their current job, employed for 2 years or less in their current position (Table 29). For respondents that are not North Dakota residents, length of time employed in their current job was nearly identical to the length of time they have been employed in the Williston Basin. Nearly half have lived in the Williston Basin and worked in their current job for two years or less (Table 29).

A majority of both respondents that live in North Dakota and respondents that live elsewhere intend to live or work in North Dakota for more than 3 years (Table 29). Over 70 percent of respondents that live elsewhere and 87 percent of respondents that live in North Dakota indicated they intend to work or live in North Dakota for more than 3 years (Table 29). Only 18 percent of

respondents that live elsewhere and only 7 percent of respondents that live in North Dakota intend to work or live in North Dakota for 2 years or less (Table 29).

Table 29. Time of Employment and Intentions to Live or Work in North Dakota, Workforce Survey, 2015		
Item	North Dakota	Elsewhere
	-----percent-----	
Length of time employed in the Williston Basin		
Less than 1 year	12.4	26.0
1 to 2 years	11.7	17.0
2.1 to 3 years	14.2	16.1
More than 3 years	61.7	40.9
(n)	(1,143)	(477)
Length of time employed in current job		
Less than 1 year	18.6	29.8
1 to 2 years	18.7	17.8
2.1 to 3 years	15.1	13.6
More than 3 years	47.6	38.8
(n)	(1,143)	(477)
Length of time intend to work or live in North Dakota		
Work Seasonally	0.1	0.6
Less than 1 year	2.5	8.2
1 to 2 years	5.0	9.8
2.1 to 3 years	5.8	11.3
More than 3 years	86.6	70.0
(n)	(1,143)	(477)

Factors that Influence Intentions to Live or Work in North Dakota

‘Affordable housing’, ‘higher paying job’ and ‘quality of life amenities’ were most frequently selected factors that influence North Dakota respondents’ intention on how long they plan to live or work in North Dakota. Forty-seven percent of respondents indicated ‘affordable housing’ and ‘higher paying job’ would influence their intentions, while 40 percent indicated ‘quality of life amenities such as recreation, entertainment and retail outlet’ would influence their intentions (Table 30). Twenty-six percent said ‘nothing would influence my plans’. Respondents indicated ‘job stress’ and ‘less dangerous job’ had little influence over their intentions to live or work in North Dakota (Table 30). Respondents wrote in a substantial number of other considerations

that would influence their intentions on how long the plan to live or work in North Dakota. The list of ‘other considerations are detailed in Appendix A-5.

Table 30. Factors That Would Influence Respondents Intentions on How Long They Plan to Live or Work in North Dakota, Respondents that Live in North Dakota, Workforce Survey, 2015		
Item	North Dakota ¹	(n)
	-----percent-----	
Affordable housing	47.3	(541)
Higher paying job	46.6	(533)
Quality of life amenities such as recreation, entertainment and retail outlets	40.6	(464)
Nothing would change or influence my plans	25.9	(296)
Public and essential services such as health care, day care, emergency services	26.3	(300)
Less stressful job with fewer hours	18.5	(211)
Less dangerous job	4.5	(51)
Other ²	8.4	(96)
¹ Because respondent could select more than one option, percentages were calculated based on the number of respondents that selected each factor rather than the total number of responses. Total number of respondents was 1,143.		
Other ² : See Appendix Table A-5.		

‘Affordable housing’, ‘higher paying jobs’ and ‘quality of life amenities such as recreation, entertainment, and retail outlets’ were the most frequently cited factors that would influence the intentions of respondents that live elsewhere on how long they plan to live or work in North Dakota (Table 31). Over 50 percent indicated ‘higher paying job’ and ‘affordable housing’ would influence their intentions. Just over a third indicated ‘quality of life amenities’ would influence their intentions and 22 percent indicated ‘nothing would change or influence my plans’. Less than 20 percent indicated ‘public and essential services such as health care, day care, emergency services’ or ‘less stressful job with fewer hours’ would influence their intentions. Only 5 percent indicated ‘less dangerous job’ would influence their intentions (Table 31). Respondents that live elsewhere wrote in a substantial number of other consideration that would influence their intentions on how long the plan to live or work in North Dakota. The list of ‘other’ considerations are detailed in Appendix A-6.

Table 31. Percent of Respondents That Indicated Various Factors Would Influence Their Intentions on How Long They Plan to Live or Work in North Dakota, Respondents that Live Elsewhere, Workforce Survey, 2015

Item	Elsewhere ¹	
	-----percent-----	(n)
Higher paying job	55.8	(266)
Affordable housing	54.7	(261)
Quality of life amenities such as recreation, entertainment and retail outlets	34.6	(165)
Nothing would change or influence my plans	21.8	(104)
Public and essential services such as health care, day care, emergency services	17.0	(81)
Less stressful job with fewer hours	15.1	(72)
Less dangerous job	5.0	(24)
Other ²	9.8	(47)
¹ Because respondents could select more than one option, percentages were calculated based on the number of respondents rather than the total number of responses. Total number of respondents was 477.		
Other ² : See Appendix Table A-6.		

Living Arrangements

There were distinct differences in respondents' living arrangements depending on residency. Respondents that were North Dakota residents much more frequently lived with a 'family member or significant other'. Seventy-one percent of North Dakota residents lived with a 'family member or significant other' (Table 32). Only 15 percent of respondents that live in North Dakota 'live alone' and only 11 percent live with 'co-workers, roommates, crew camps or dormitories'. Alternately 50 percent of respondents that live elsewhere live with 'co-workers, roommates, crew camps or dormitories'. A third of respondents that live elsewhere 'live alone' and only 10 percent of respondents that live elsewhere live with a 'family member or significant other' while working in North Dakota. Findings are detailed in Table 32 and Figure 27.

Table 32. Living Arrangements, by Primary Residency, Workforce Survey, 2015		
	Primary Residence	
Item	North Dakota	Elsewhere
	-----percent-----	
Live alone	15.7	32.5
Live with family member, significant other, boyfriend or girlfriend	71.4	10.8
Co-workers, roommates, crew camps or dormitories	11.2	50.5
Other ¹	1.6	6.1
	(1,158)	(489)
¹ Other: See Appendix Table A-8		

Living Arrangements While Working in North Dakota, by Residency

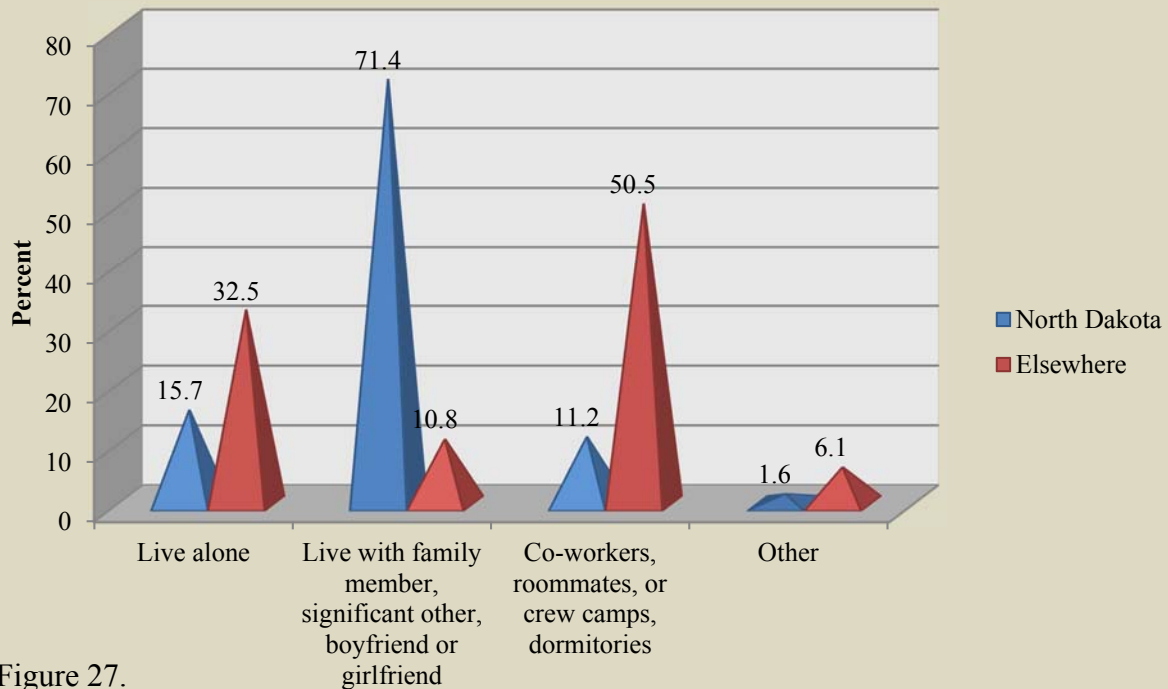


Figure 27.

Work Schedules: Days ‘On’, Days ‘Off’, Hours in Shift

Respondents were asked about their work schedules, specifically, the number of days they work ‘on’, the number of days ‘off’ following a work period and the length of their shift. Responses were analyzed by residency.

Two-thirds of respondents that live in North Dakota indicated they work 1 to 5 days ‘on’ compared to only one-third of respondents that live elsewhere. Nearly 40 percent of respondents that live elsewhere indicated they work, 11 to 14 days ‘on’ compared to only 10 percent of respondents from North Dakota (Table 33 and Figure 28).

Consistent with the number of days ‘on’, over 70 percent of respondents from North Dakota indicated 1 to 2 days ‘off’ following a work period compared to only 33 percent of respondents that live elsewhere. Half of respondents that live elsewhere indicated 6 to 10 days ‘off’ following a work period compared to only 19 percent of respondents that live in North Dakota. Eleven percent of respondents that live elsewhere indicated 11 to 15 days ‘off’ following a work period compared to only 2 percent of respondents from North Dakota (Table 33 and Figure 29).

Respondents that live elsewhere more frequently worked longer shifts than respondents that live in North Dakota. Nearly 60 percent of North Dakota respondents indicated a shift of 8 hours or less or 9 to 10 hours compared to only 20 percent of respondents that live elsewhere (Table 33). Alternately, 30 percent of respondents that live elsewhere indicated a work shift of 13 to 14 hours compared to only 10 percent of respondents that live in North Dakota. A small percentage of respondents indicated a work shift of 15 to 24 hours, 19 percent of respondents that live elsewhere and 6 percent of respondents that live in North Dakota. Some respondents indicated a working shifts of more than 24 hours. Those responses were not included in the assessment of length of shift. After review of the responses, it was clear that those respondents that indicated a shift of more than 24 hours misunderstood the question. For example, some respondents indicated the length of their shift was “40 hours”. It is likely that respondent worked 40 hours per week and their shift was 8 hours.

Table 33. Work Schedules, Number of Days ‘On’, Days ‘Off’ and Length of Shift, by Residency Workforce Survey, 2015

	Primary Residence	
Item	North Dakota	Elsewhere
	-----percent-----	
Number of Days ‘on’		
1 to 5 days	67.5	27.0
6 to 10 days	14.5	10.1
11 to 14 days	10.3	36.5
15 to 21 days	6.4	19.6
More than 21 days	1.4	6.8
	(1,132)	(474)
Number of Days ‘off’		
1 or 2 days	72.9	32.6
3 to 5 days	6.1	4.3
6 to 10 days	18.8	51.5
11 to 15 days	2.3	10.5
	(1,107)	(466)
Number of Hours in Shift		
8 hours or less	26.1	7.6
9 to 10 hours	32.2	12.3
11 to 12 hours	25.8	31.7
13 to 14 hours	9.9	29.8
15 to 16 hours	2.4	6.6
17 to 18 hours	2.1	8.7
19 to 24 hours	1.5	3.4
(n)	(1,090)	(473)

Number of Days 'On', by Residency

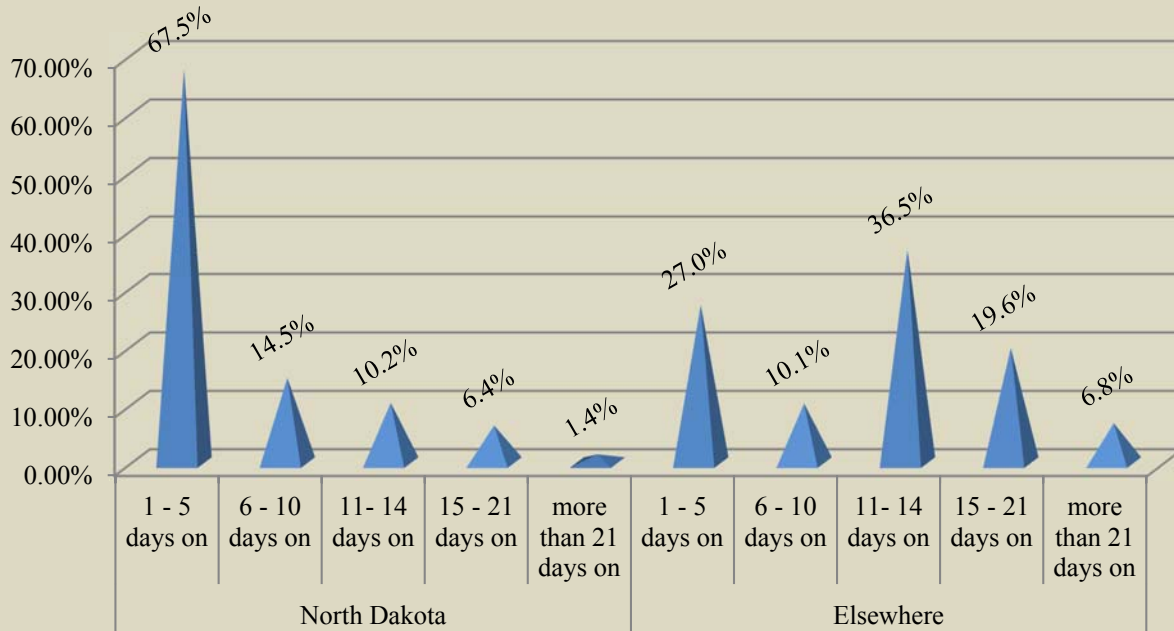


Figure 28.

Respondent Residency and Number of Work Days "On"

Number of Days 'Off', by Residency

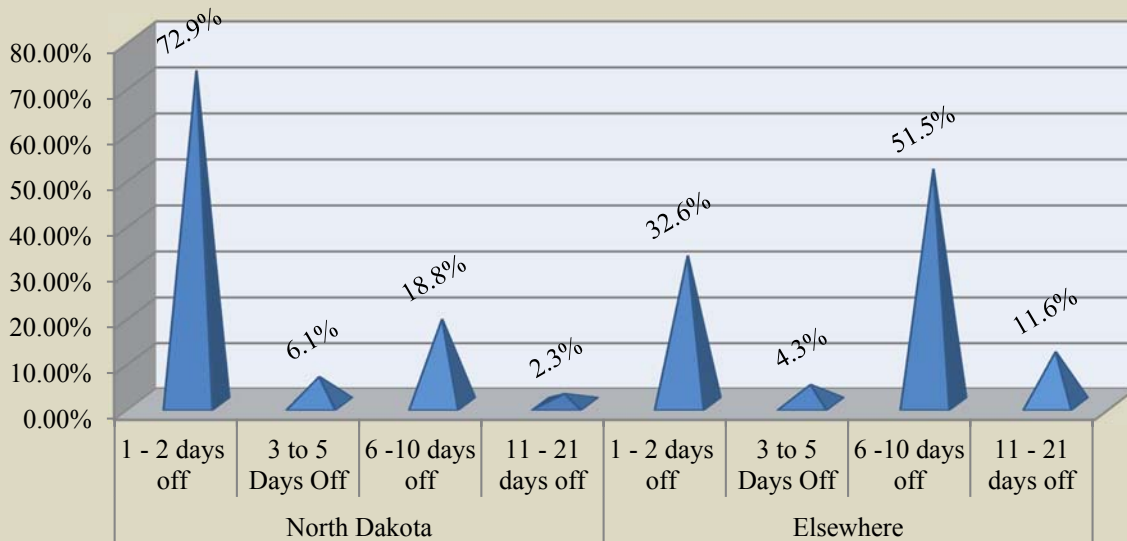
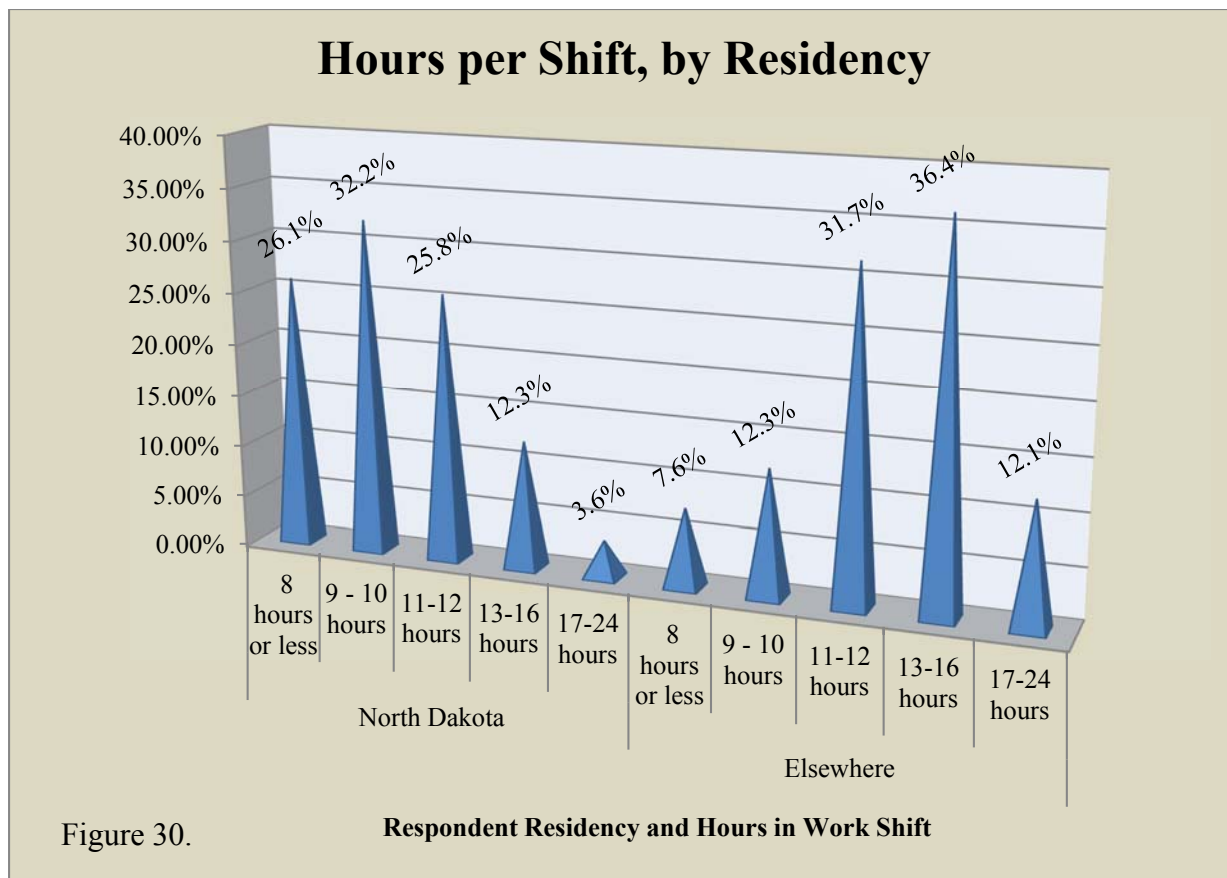


Figure 29.

Respondent Residency and Number of Work Days 'Off'



Number of days ‘on’ and number of days ‘off’ correlate well for both respondents that work in North Dakota and those that live elsewhere. Shorter work periods ‘on’ are followed by shorter work periods ‘off’ and longer work periods ‘on’ are more followed by longer periods ‘off’. Ninety-six percent of respondents that live in North Dakota and 95 percent of respondents that live elsewhere that work 1 to 5 days ‘on’ and have 1 to 2 days ‘on’ (Table 34).

Similarly longer work periods ‘on’ are followed by longer work periods ‘off’. Over 70 percent of respondents that live elsewhere and 90 percent of respondents that live in North Dakota that work 15 to 20 days ‘on’ and have 6 to 10 days ‘off’. Findings are detailed in Table 34 and Figure 31.

Table 34. Number of Days 'On' and Number of Days 'Off', by Residency, Workforce Survey, 2015

Item	1 - 2 days off	3 - 5 days off	6 - 10 days off	11 - 21 days off	(n)
Number of Days 'on'	-----percent-----				
North Dakota Residents					
1 to 5 days	96.0	4.0	0.0	0.0	(758)
6 to 10 days	47.2	17.4	34.7	0.7	(144)
11 to 14 days	1.7	5.2	73.9	19.1	(115)
15 to 21 day	1.4	2.8	94.4	1.4	(72)
More than 21 days	30.8	23.1	38.5	7.7	(13)
Residents Elsewhere					
1 to 5 days	95.3	4.7	0.0	0.0	(127)
6 to 10 days	59.0	20.5	20.5	0.0	(39)
11 to 14 days	1.7	1.2	77.9	19.2	(172)
15 to 21 day	1.1	3.2	87.1	8.6	(93)
More than 21 days	3.1	3.1	53.1	40.6	(32)

¹No respondents reported more than 21 days 'off'.

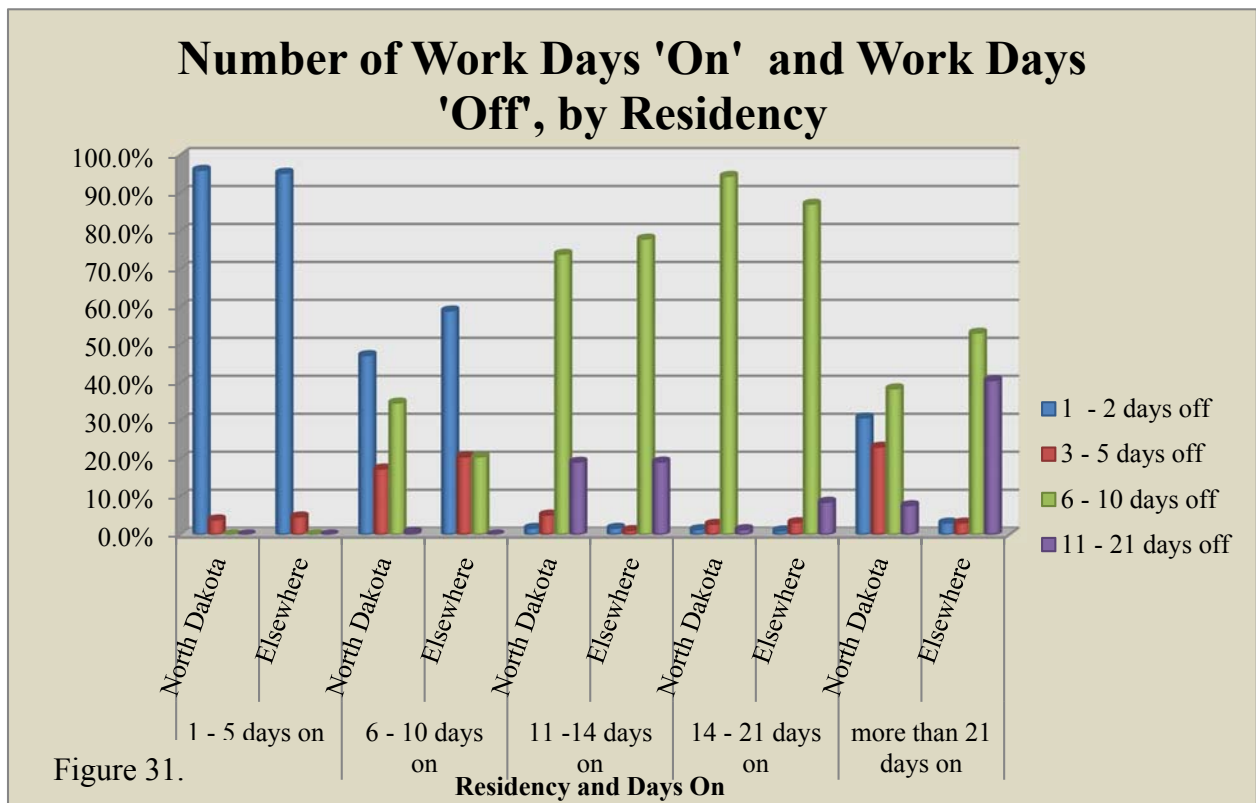


Table 35. Number of Days ‘On’ and Hours in Shift, by Residency, Workforce Survey, 2015

Item	8 hours or less	9-10 hours	11-12 hours	13-16 hours	17-24 hours	(n)
Number of Days ‘On’	-----percent-----					
North Dakota Residents						
1 to 5 days	34.3	39.8	20.7	5.2	0.0	(714)
6 to 10 days	6.4	29.9	38.8	22.9	1.7	(157)
11 to 14 days	3.6	8.9	40.2	31.2	16.1	(112)
15 to 21 day	3.0	7.6	33.3	31.8	24.2	(66)
More than 21 days	18.7	18.7	25.0	31.3	6.3	(16)
Residents Elsewhere						
1 to 5 days	16.5	22.3	38.8	22.3	0.0	(121)
6 to 10 days	2.2	17.4	39.1	37.0	4.3	(46)
11 to 14 days	0.6	5.4	33.3	40.5	20.2	(168)
15 to 21 day	2.2	12.1	19.8	45.1	20.9	(91)
More than 21 days	0.0	9.4	34.4	50.0	6.3	(32)
¹ No respondents reported more than 21 days ‘off’.						

Hours in shift and the number of work days ‘on’ correlate well with the number of days ‘on’ and number of days ‘off’ for both respondents that live in North Dakota and respondents that live elsewhere. Generally respondents with fewer days ‘on’ have shorter work shifts than respondents that have longer periods of days ‘on’. The trend is somewhat more prevalent for respondents that live elsewhere than respondents that live in North Dakota. Seventy-four percent of respondents that live in North Dakota that work 1 to 5 days ‘on’ have shifts of ‘8 hours or less’ or ‘9-10 hours’ compared to 39 percent of respondents that live elsewhere (Table 35). Across nearly every category of work periods ‘on’ a greater percentage of respondents that live elsewhere report working longer shifts than respondents that live in North Dakota. For example, only 5 percent of respondents that live in North Dakota reported shifts of 13 to 16 hours associated with days ‘on’ of 1 to 5 days compared to 22 percent of respondents from elsewhere. Similarly, 31 percent of respondents from North Dakota indicated working shifts of 13 to 16 hours with work periods of 11 to 14 days ‘on’ compared to 41 percent of respondents that live elsewhere for the same work period. Responses are detailed in Table 35 and Figure 32.

Numbers of Work Days 'On' and Hours per Shift, by Residency

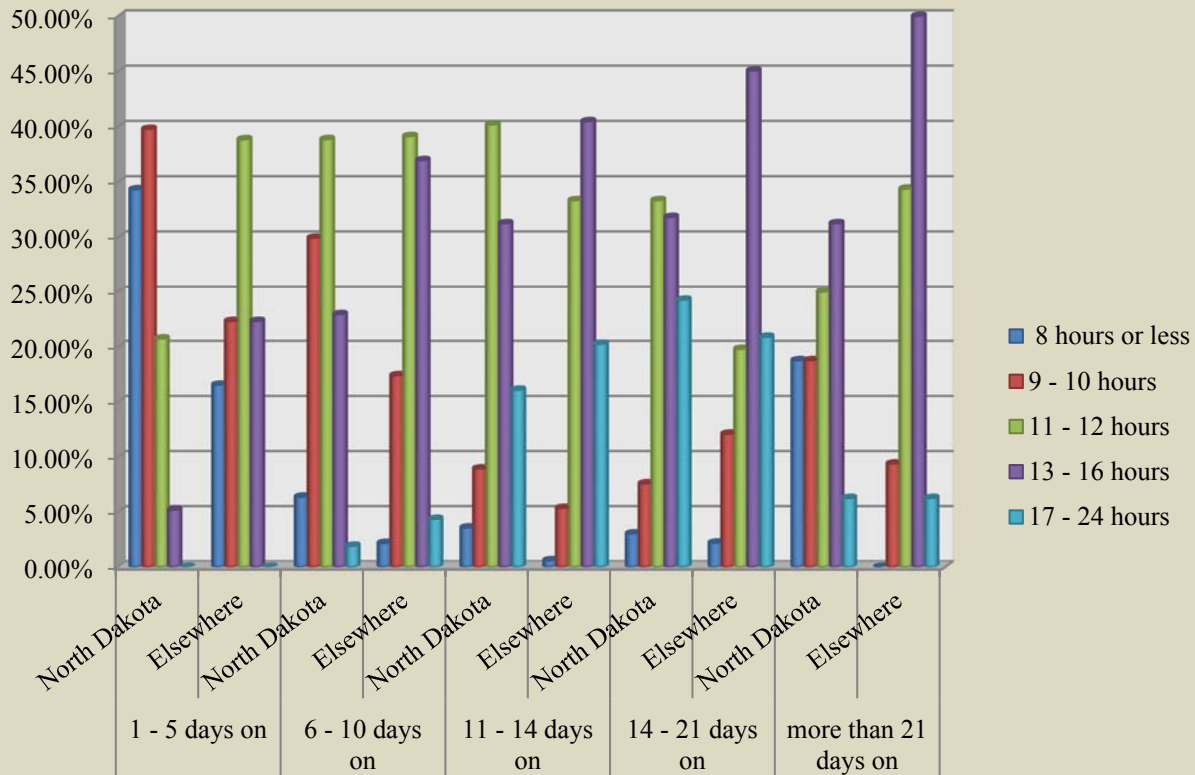


Figure 32.

Work Schedule: Days 'On', Days 'Off', Hours in Shift by Job Description

The trend for longer work periods 'on' for respondents that live elsewhere was consistent across all job descriptions. Forty percent of respondents that live in North Dakota with a job description of 'field operations' work 1-5 days 'on' compared to only 10 percent of respondents that live elsewhere (Table 36). Similarly, only 20 percent of North Dakota respondents that provide 'field operations support such as mechanic, equipment maintenance, safety', work 11-14 days 'on' compared to 52 percent of respondents that live elsewhere. For some job descriptions such as 'office, clerical, administrative support staff' for respondents that live elsewhere the number of observations is small. Because of the small number of observations from respondents that live elsewhere, for some job descriptions caution should be exercised when interpreting those results. It may not be appropriate to generalize findings for some job descriptions to the

larger workforce population. Findings for the number of days ‘on’ by job description and residency are detailed in Table 36 and Figure 33.

Table 36. Number of Days ‘On’, by Job Description, by Residency, Workforce Survey, 2015						
Item	1-5 days on	6-10 days on	11-14 days on	14-21 days on	more than 21 days	(n)
Job Description	-----percent-----					
North Dakota Residents						
Field operations	39.8	23.5	17.7	16.7	2.5	(362)
Field operations support, such as mechanic, equipment maintenance, safety	63.5	12.2	20.0	2.6	1.7	(115)
Office, clerical, administrative, support staff	88.7	6.1	3.5	1.3	0.4	(230)
Professional services, management, engineering, geology	81.9	10.0	5.3	1.6	1.3	(321)
Trucking, transportation	78.6	19.1	1.1	1.1	0.0	(89)
Residents Elsewhere						
Field operations	9.6	7.4	47.0	31.3	4.8	(230)
Field operations support, such as mechanic equipment maintenance, safety	12.0	9.3	52.0	20.0	6.7	(75)
Office, clerical, administrative, support staff	61.9	0.0	28.6	9.5	0.0	(21)
Professional services, management, engineering, geology	55.7	11.5	24.6	3.3	4.9	(61)
Trucking, transportation	58.5	18.3	6.1	1.2	15.9	(82)

Number of Days 'On', by Job Description, by Residency

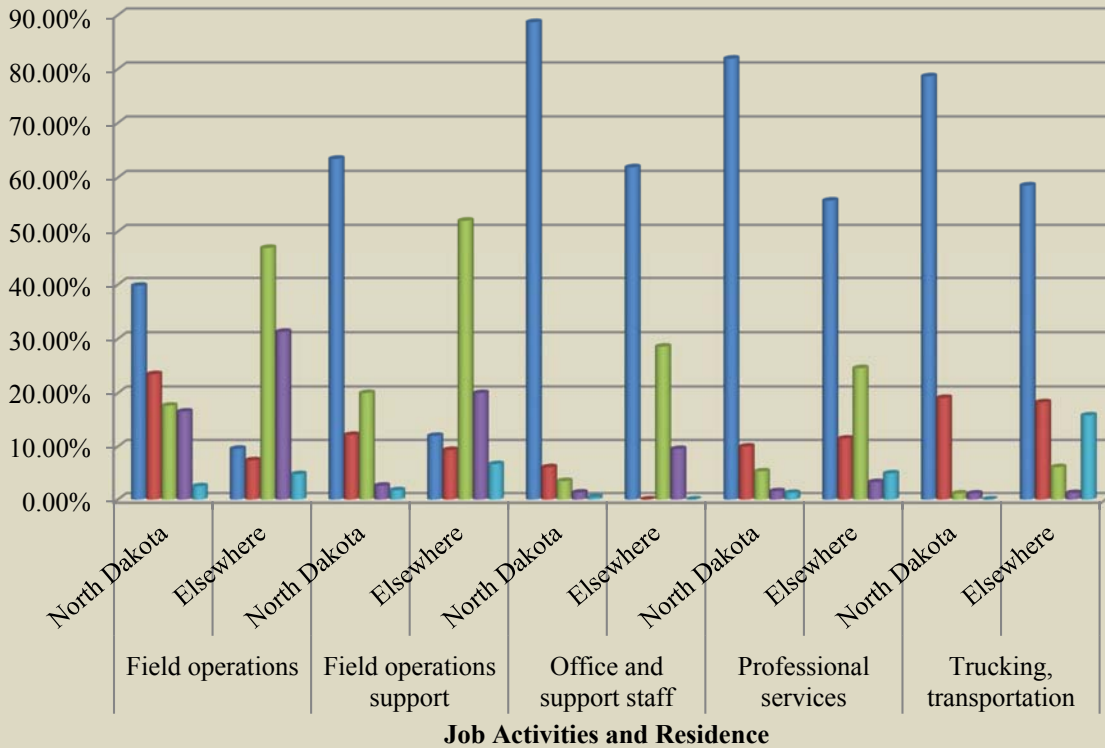


Figure 33.

■ 1-5 days on ■ 6-10 days on ■ 11-14 days on ■ 14-21 days on ■ more than 21 days on

Respondents that live elsewhere more frequently have longer periods of days 'off' across all job descriptions. Sixty seven percent of respondents that live elsewhere with a job description of 'field operations' have 6-10 days off compared to 41 percent of respondents that live in North Dakota (Table 37). Alternately, North Dakota residents are more likely to have fewer days 'off' than respondents that live elsewhere. Sixty-eight percent of respondents from North Dakota with a job description of 'field operations support, such as mechanic, equipment maintenance, safety' have 1-2 days off compared to only 16 percent of respondents that live elsewhere (Table 37).

For some job descriptions such as 'office, clerical, administrative support staff', for respondents that live elsewhere, the number of observations is small. Because of the small number of observations, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings to the larger workforce population for some job descriptions. Findings for the number of days off by job description and residency are detailed in Table 37 and Figure 34.

Table 37. Number of Days 'Off', by Job Description, by Residency, Workforce Survey, 2015

Item	1-2 days off	3-5 days off	6-10 days off	11-21 days off	(n)
Job Description	-----percent-----				
North Dakota					
Field operations	44.7	8.4	40.7	6.2	(356)
Field operations support, such as mechanic equipment maintenance, safety	68.1	8.8	23.0	0.0	(113)
Office, clerical, administrative, support staff	88.9	7.1	4.0	0.0	(226)
Professional services, management, engineering, geology	90.7	1.9	6.7	0.6	(313)
Trucking, transportation	86.9	5.9	5.9	1.2	(84)
Elsewhere					
Field operations	12.7	3.5	66.7	17.1	(228)
Field operations support, such as mechanic equipment maintenance, safety	16.0	8.0	73.3	2.7	(75)
Office, clerical, administrative, support staff	52.4	9.5	28.6	9.5	(21)
Professional services, management, engineering, geology	61.4	1.7	28.1	8.8	(57)
Trucking, transportation	76.3	2.5	13.8	7.5	(80)

Number of Days 'Off', by Job Description, by Residency

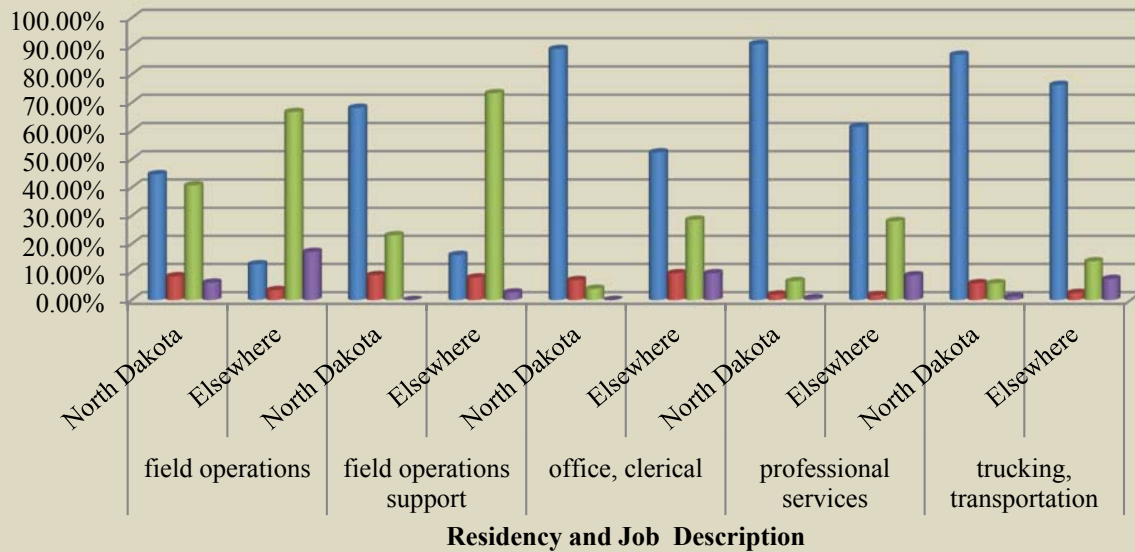


Figure 34. ■ 1-2 days off ■ 3-5 days off ■ 6-10 days off ■ 11-21 days off

Like number of days 'on' and numbers of days 'off', respondents that live elsewhere work longer shifts than respondents that live in North Dakota. Forty-one percent of respondents from North Dakota with a job description of 'field operations' work shifts of '8 hours or less' or '9-10 hours' compared to only 11 percent of respondents that live elsewhere (Table 38). Alternately, 21 percent of respondents from North Dakota with a job description of 'field operations' work 13-16 hours shifts compared to 40 percent of respondents that live elsewhere. Again, for some job descriptions for respondents that live elsewhere, the small number of observations makes generalization to the larger population problematic. Because of the small number of observations, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings for some job descriptions to the larger workforce population. Responses are detailed in Table 38 and Figure 35.

Table 38. Number of Hours in Shift, by Job Description, by Residency, Workforce Survey, 2015

Item	8 hours or less	9-10 hours	11-12 hours	13-16 hours	17-24 hours	(n)
Job Description	-----percent-----					
North Dakota Residents						
Field operations	14.8	26.7	28.4	20.7	9.4	(352)
Field operations support, such as mechanic equipment maintenance, safety	22.9	26.6	36.7	11.9	1.8	(109)
Office, clerical, administrative, support staff	53.2	33.5	11.9	1.4	0.0	(218)
Professional services, management, engineering, geology	26.8	47.4	19.6	4.9	1.3	(306)
Trucking, transportation	6.6	4.4	57.1	31.9	0.0	(91)
Residents Elsewhere						
Field operations	3.8	7.3	26.1	39.7	23.1	(234)
Field operations support, such as mechanic equipment maintenance, safety	7.1	15.7	47.1	28.6	1.4	(70)
Office, clerical, administrative, support staff	34.8	39.1	26.1	0.0	0.0	(23)
Professional services, management, engineering, geology	18.6	27.1	32.2	18.6	3.4	(59)
Trucking, transportation	3.7	3.7	34.1	58.5	0.0	(82)

Number of Hours per Shift, by Job Description, by Residency

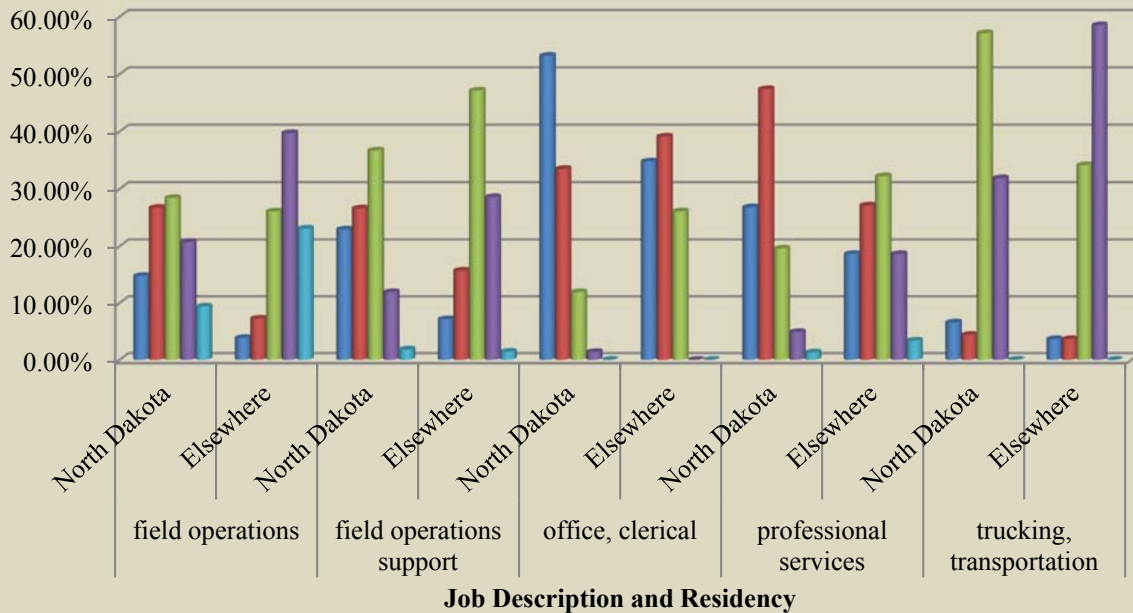


Figure 35. 8 hours or less 9-10 hours 11-12 hours 13-16 hours 17-24 hours

Work Schedule: Days ‘On’, Days ‘Off’, Hours in Shift, by Industry Activity

Based on responses to the question ‘what type of activities and services are related to your job’, industry activities were combined to create three categories, ‘development activities only’, ‘production/operations activities only’, and ‘both development and production/operations activities’. Data from the following categories were combined to represent ‘development activities’:

- Infrastructure construction, such as roads, pipelines, municipal services, rail
- Drilling, well site preparations, geophysical services
- Fracing and well completion services

Data from the following categories were combined to represent ‘operations/production activities’:

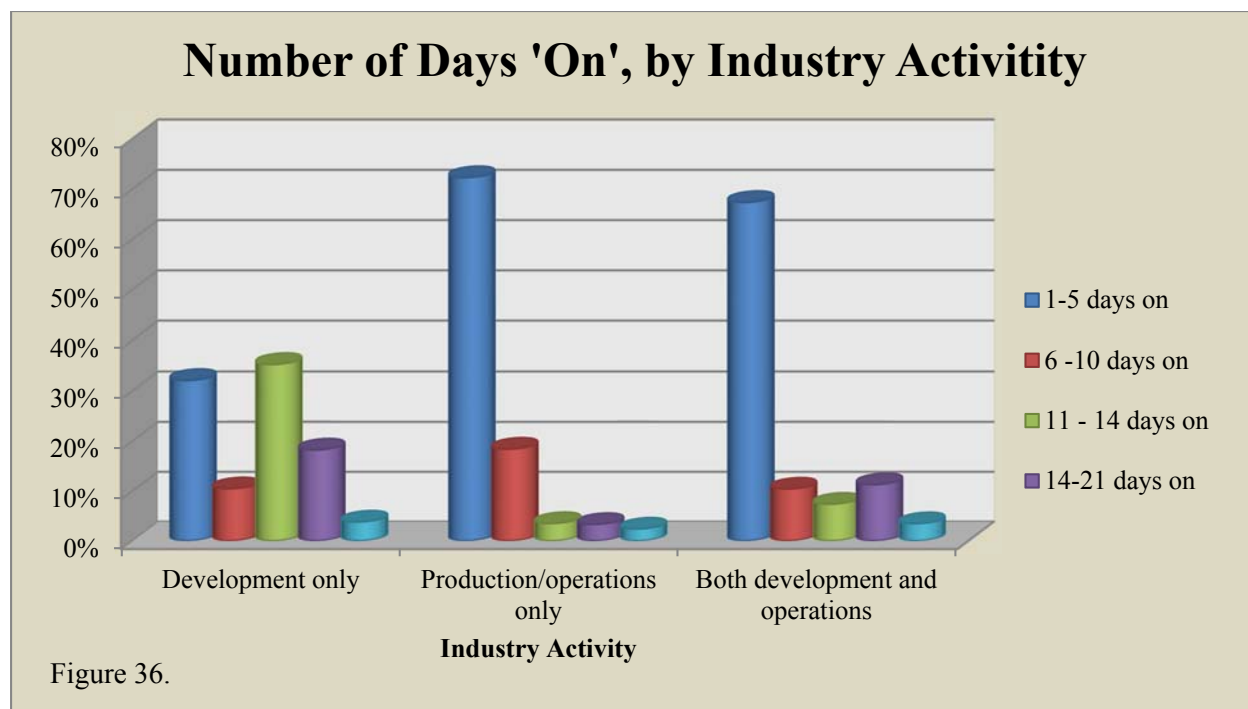
- Production and operations, including well maintenance and transportation
- Natural gas processing
- Rail and pipeline operations, gas and oil shipments

Respondents that selected some activities in each category were placed in the ‘both development and operations/production’ activities.

Development activities were more likely to have longer work periods of days ‘on’. Alternately 57 percent of respondents that indicated their jobs were related to ‘development only’ worked 11 or more days ‘on’ compared to only 9 percent for ‘production/operations’ activities only.

Seventy-two percent of respondents that indicated their jobs were related to production/operations only’ worked 1-5 days ‘on’ compared to only 32 percent for ‘development only’ activities. Two thirds of respondents that indicated their job description related to both ‘development’ activities and ‘production/operations’ activities had work schedules of 1-5 days ‘on’. Work schedules for various activities were also examined by residency. The same trend of longer periods of work days ‘on’ associated with development activities applied regardless of residency, and as described previously, longer work periods ‘on’ were more pronounced for workers that do not live in North Dakota. Findings are detailed in Table 39 and Figure 36.

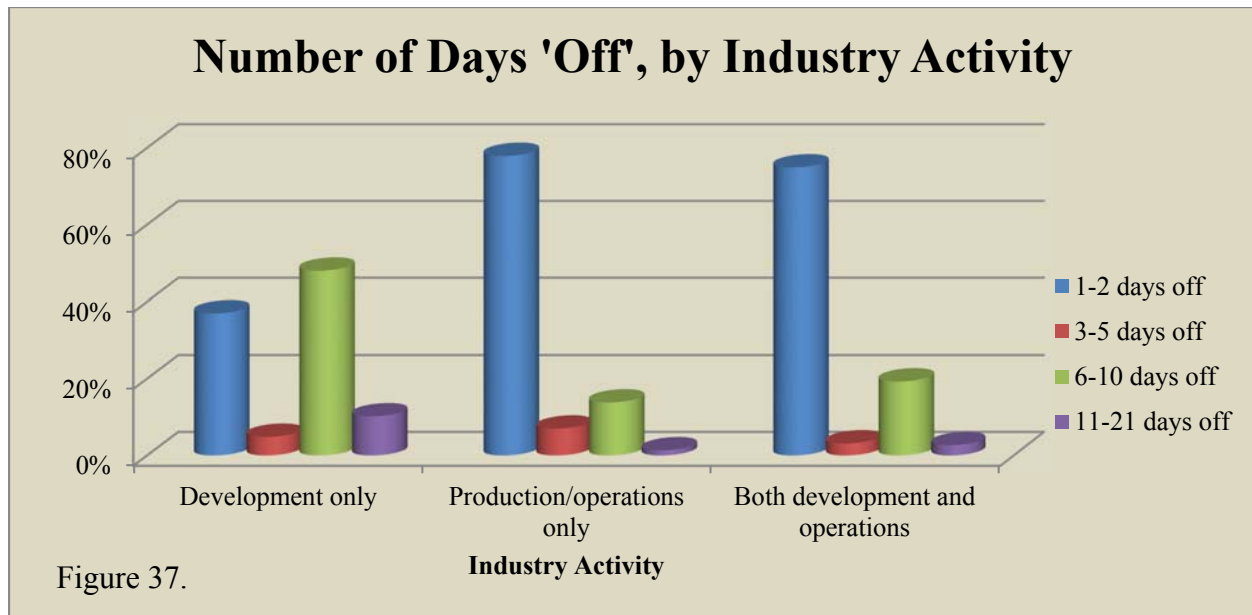
Table 39. Number of Days ‘On’, by Industry Activity, by Residency, Workforce Survey, 2015						
Item	1-5 days on	6-10 days on	11-14 days on	14-21 days on	more than 21 days	(n)
Type of Activity	-----percent-----					
Development only						
All respondents	32.1	10.5	35.3	18.3	3.8	(629)
North Dakota	48.1	14.3	23.9	12.6	1.1	(442)
Elsewhere	10.2	5.3	50.9	26.0	7.6	(100)
Production/Operations only						
All respondents	72.3	18.5	3.5	3.3	2.4	(542)
North Dakota	76.9	18.3	1.6	1.6	1.6	(442)
Elsewhere	52.0	19.0	12.0	11.0	6.0	(100)
Both Development and Production/Operations						
All respondents	67.4	10.4	7.4	11.3	3.5	(230)
North Dakota	73.3	9.1	5.1	10.2	2.3	(176)
Elsewhere	48.1	14.8	14.8	14.8	7.4	(54)



Consistent with longer work periods 'on', 'development activities only' were also characterized by longer periods of work days 'off'. Just fewer than 50 percent of respondents that indicated their job description was related to 'development activities only' indicated 6-10 days 'off' compared to only 14 percent for 'production/operations activities only' (Table 40). Seventy eight percent of respondents that indicated their jobs were related to 'production/operations only' most frequently had 1-2 days 'off' between work periods. Respondents that indicated their job description was related to both 'development and production/operations' activities most frequently had work periods 'off' of 1-2 days (75 percent). Responses were also examined by residency and were found to be consistent with other findings; respondents that do not live in North Dakota more frequently have longer periods of work days off than those that live in North Dakota regardless of industry activity. Findings are detailed in Table 40 and Figure 37.

Table 40. Number of Days 'Off', by Industry Activity, by Residency, Workforce Survey, 2015

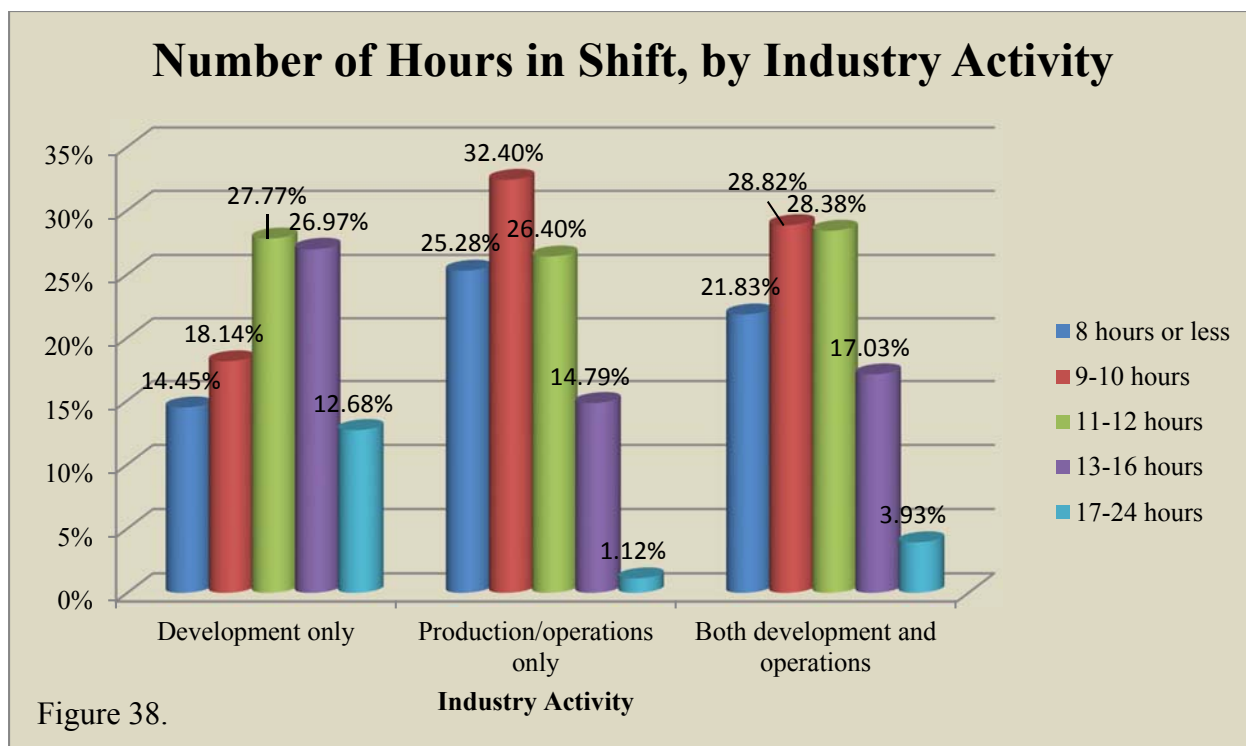
Item	1-2 days off	3-5 days off	6-10 days off	11-21 days off	(n)
	-----percent-----				
Development					
All respondents	37.0	4.8	48.0	10.2	(619)
North Dakota	54.3	6.7	33.1	5.9	(357)
Elsewhere	13.4	2.3	68.3	16.0	(262)
Production/Operations					
All respondents	77.9	7.0	13.8	1.3	(529)
North Dakota	81.0	7.2	11.6	0.2	(463)
Elsewhere	63.9	6.2	23.7	6.2	(97)
Both Development and Production/Operations					
All respondents	74.9	3.1	19.2	2.7	(223)
North Dakota	79.5	2.9	15.8	1.7	(171)
Elsewhere	59.6	3.8	30.8	5.8	(52)



Hours per shift were somewhat more evenly distributed; however, respondents that indicated their job description was related to 'production/operations only' more frequently indicated work

shifts of ‘8 hours or less’ or 9-10 hours’, 58 percent compared to only 32 percent for respondents that indicated their job description was related to ‘development only’ activities (Table 41). Respondents that indicated their job description was related to ‘development only’ activities more frequently worked shifts of 11 hours or more. Sixty-seven percent of respondents that indicated their jobs were related to ‘development activities only’ worked shifts of 11 hours or more. Hours per shift were fairly evenly distributed for those respondents that indicated their job description was related to both ‘development and production/operations’. However respondents most frequently worked shifts of 12 hours or less. Nearly 80 percent of respondents that indicated their job description was related to ‘both development and production/operations’ indicated they worked shifts of 12 hours or less. Hours per shift were also examined by residency. Respondents that do not live in North Dakota more frequently worked more hours per shift than respondents that live in North Dakota regardless of industry activity. Findings are detailed in Table 41 and Figure 38.

Table 41. Number of Hours in Shift, by Industry Activity, by Residency, Workforce Survey, 2015						
Item	8 hours or less	9-10 hours	11-12 hours	13-16 hours	17-24 hours	(n)
	-----percent-----					
Development only						
All respondents	14.5	18.1	27.8	27.0	12.7	(623)
North Dakota	20.7	26.4	26.7	17.2	8.9	(348)
Elsewhere	4.1	7.8	29.8	40.3	17.9	(268)
Production/operations only						
All respondents	25.3	32.4	26.4	14.8	1.1	(534)
North Dakota	27.0	37.3	24.7	10.3	0.7	(429)
Elsewhere	9.8	17.6	33.3	31.4	7.8	(101)
Both Development and Production/Operations						
All respondents	21.8	28.8	28.4	17.0	3.9	(229)
North Dakota	23.1	32.9	27.7	13.3	2.9	(173)
Elsewhere	9.8	17.6	33.3	31.4	7.8	(51)



Non-resident Respondents' Characteristics and Intentions

Non-resident respondent characteristics were examined by their intentions to, or desire to, move to North Dakota.

Job Description

The job descriptions for respondents that want to move to North Dakota were fairly evenly distributed between the two groups. About one third of respondents that want to move to North Dakota had job descriptions of 'field operations'. Compared to 52 percent of respondents that indicated they did not want to move to North Dakota. The remaining respondents' job descriptions for those that do not want to move to North Dakota were fairly evenly split between 'trucking, transportation', 'field operations support', and 'professional services' (Table 42 and Figure 39). Because of the small number of observations for respondents that want to move to North Dakota, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings to the larger workforce population.

Table 42. Job Description of Respondents that Do Not Live in North Dakota, by Intentions to Move to North Dakota, Workforce Survey, 2015

Item	Want to move to ND	Do not want to move to ND
	-----percent-----	
Field operations	35.1	51.8
Trucking, transportation	31.9	14.0
Field operations support such as mechanic, equipment maintenance, safety	13.8	15.8
Professional services, such as engineering, accounting, management, geology	12.8	12.5
Infrastructure construction	0.0	1.0
Other ¹	1.1	0.0
(n)	(94)	(392)

¹Respondents did not provide a description of their job.

Job Description of Respondents That Do Not Live in North Dakota and Their Intentions to Move to North Dakota

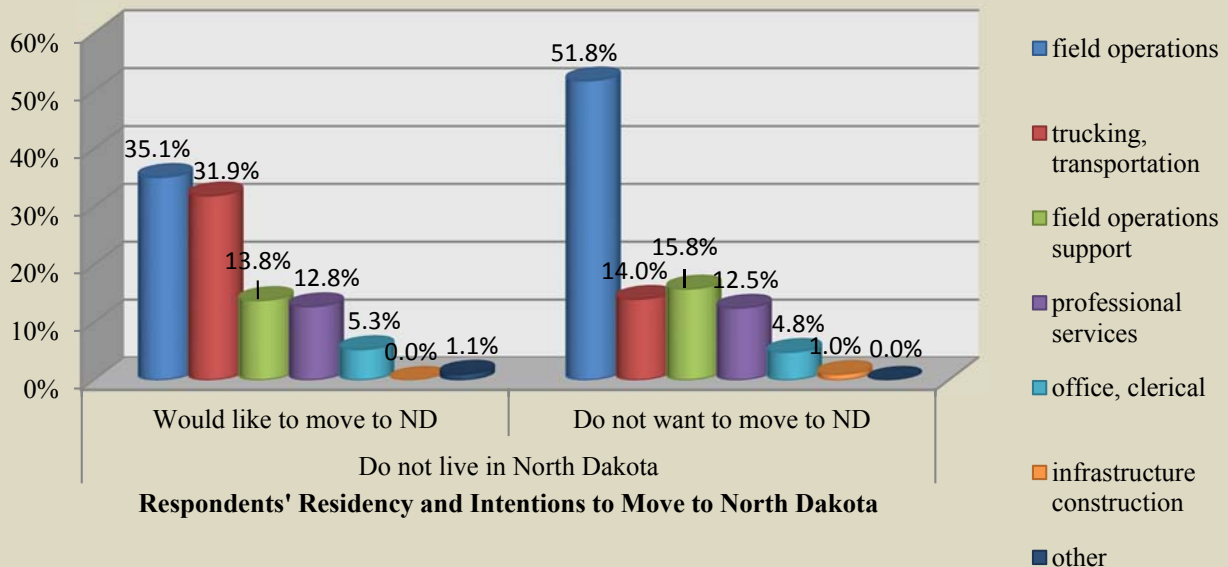


Figure 39.

Industry Activity

Respondents' intentions to, or desire to, move to North Dakota were also examined by industry activity. Respondents that do not want to move to North Dakota most frequently had a job related to 'development activities' only. Sixty-eight percent of respondents that do not want to move to North Dakota indicated their job description was related to 'development activities only' (Table 43). The distribution of industry activity for respondents that want to move to North Dakota was more evenly split. Forty-three percent of respondents that want to move to North Dakota indicated their job description was related to industry activities related to 'development activities only', 37 percent related to 'production/operations activities only', and 20 percent related to 'development and production/operations activities' (Table 43 and Figure 40). Because of the small number of observations, describing industry activities of respondents that want to move to North Dakota, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings to larger workforce population that lives elsewhere and wants to move to North Dakota.

Table 43. Industry Activity Related to Job Description of Respondents that Do Not Live in North Dakota, by Intentions to Move to North Dakota		
Item	Want to move to ND	Do not want to move to ND
	-----percent-----	
Development activities only	43.2	67.6
Production/operations activities only	37.0	21.2
Development and production/operations activities	19.7	11.2
(n)	(81)	(349)

Industry Activity, Respondents That Do Not Live in North Dakota, by Intentions to Move to North Dakota

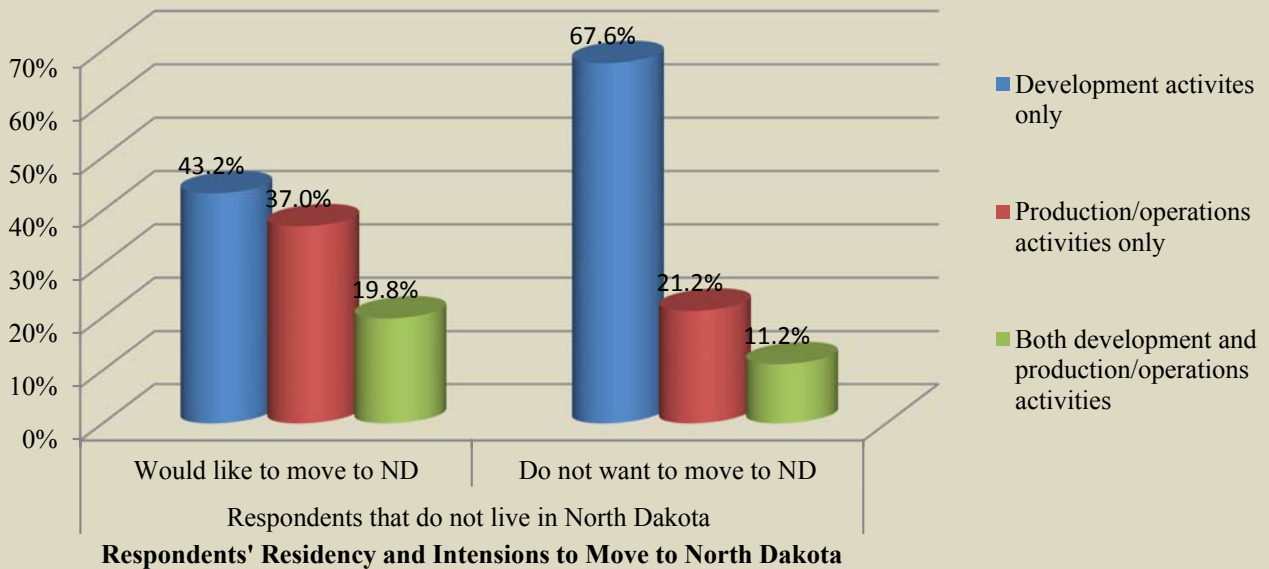


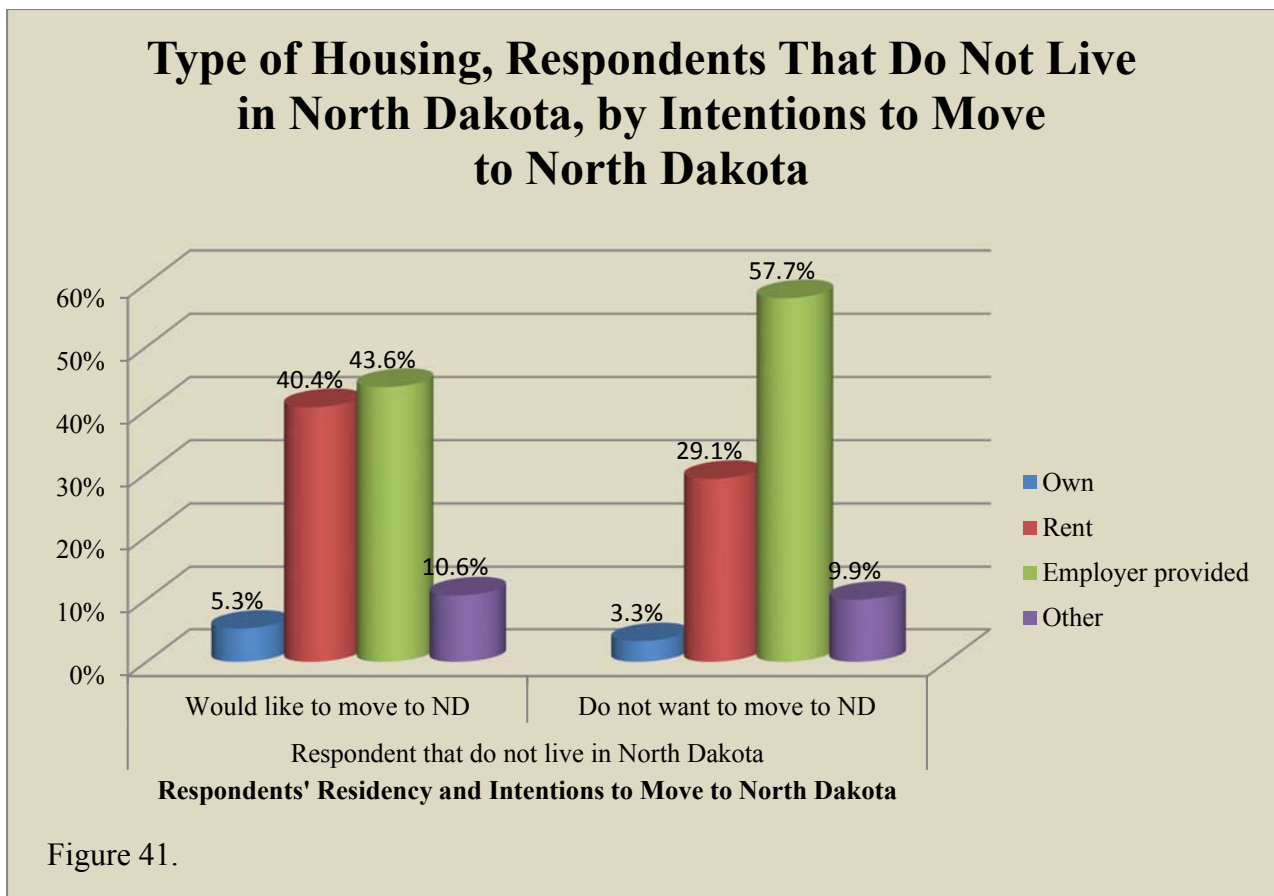
Figure 40.

Type of Housing

The type of housing used by both respondents that want to move to North Dakota and those that do not want to move to North Dakota was predominately rental and employer provided housing. Fifty-seven percent of respondents that do not want to move to North Dakota live in employer provided housing while working in North Dakota and 29 percent rent housing (Table 44). Respondents that want to move to North Dakota were more evenly split between employer provided housing and renting housing, 43 and 40 percent, respectively (Table 44 and Figure 41). Because of the small number of observations describing type of housing used by respondents that want to move to North Dakota, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings to larger workforce population that lives elsewhere and wants to move to North Dakota.

Table 44. Type of Housing Used While Working in North Dakota, Respondents that Do Not Live in North Dakota, by Intentions to Move to North Dakota, Workforce Survey, 2015

Item	Want to move to ND	Do not want to move to ND
	-----percent-----	
Own	5.3	3.3
Rent	40.4	29.1
Employer provided	43.6	57.6
Other	10.6	10.0
(n)	(81)	(349)



Because employer provided housing was so prevalent for respondents that do not live in North Dakota, type of employer provided housing was examined by respondents' intentions to move to North Dakota. Fifty-seven percent of employer provided housing for respondents that do not want to move to North Dakota was 'crew camps' (Table 45). Adding the percentage of respondents that indicated their employer provided housing was 'RV, camper, mobile home' and 'job site housing' brought the percentage of respondents that do not want to move to North

Dakota and live in employer provided housing that is temporary and non-traditional to 72 percent.

The type of employer provided housing that respondents' that want to move to North Dakota use while working in North Dakota was more evenly split between the various housing types. About one third of respondents that do not live in North Dakota but want to move to North Dakota, live in either 'crew camp' or 'apartment' (Table 45). About a 25 percent live in 'RV, camper, mobile home'. Fifty-four percent of respondents that do not live in North Dakota but want to move to North Dakota live in some type of temporary or non-traditional accommodations. Findings are details in Table 45 and Figure 42. Because of the small number of observations, describing the type of employer provided housing for respondents that want to move to North Dakota, caution should be exercised when interpreting those results. It may not be appropriate to generalize findings to larger workforce population that lives elsewhere and wants to move to North Dakota.

Table 45. Type of Employer Provided Housing Used While Working in North Dakota, Respondents that Do Not Live in North Dakota, by Intentions to Move to North Dakota, Workforce Survey, 2015		
Item	Want to move to ND	Do not want to move to ND
	-----percent-----	
Crew camp	29.3	57.5
Apartment	34.1	15.5
RV, camper, mobile home	24.4	7.1
Job site housing	0.0	7.5
Condo, townhouse	4.9	7.5
Hotel	2.4	1.8
Single family home	2.4	0.4
Other	(41)	(226)

Type of Employer Provided Housing, Respondents That Do Not Live in North Dakota, and Intensions to Move to North Dakota

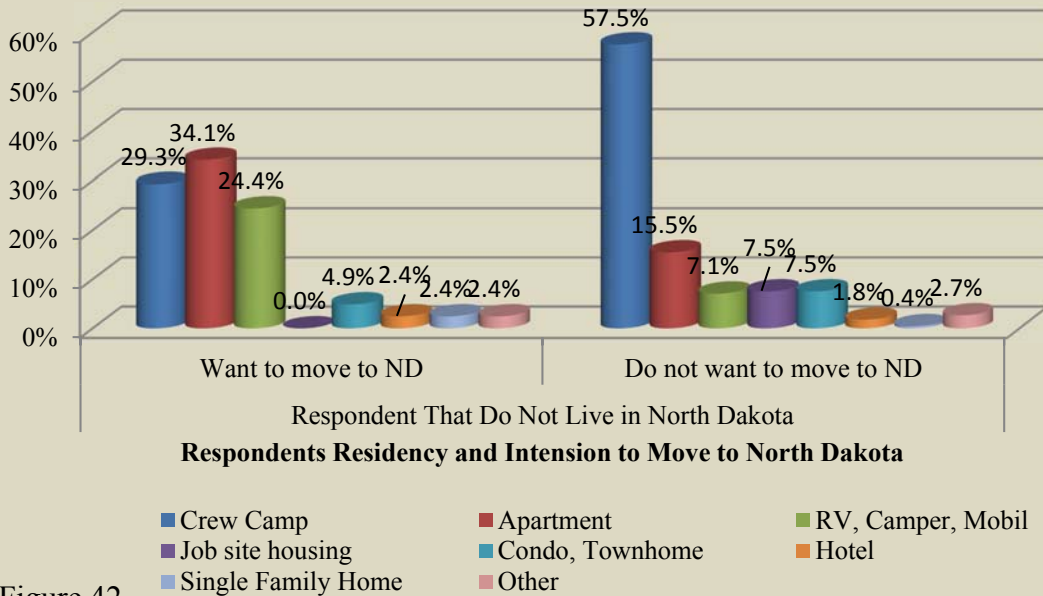


Figure 42.

Intentions to Work in North Dakota

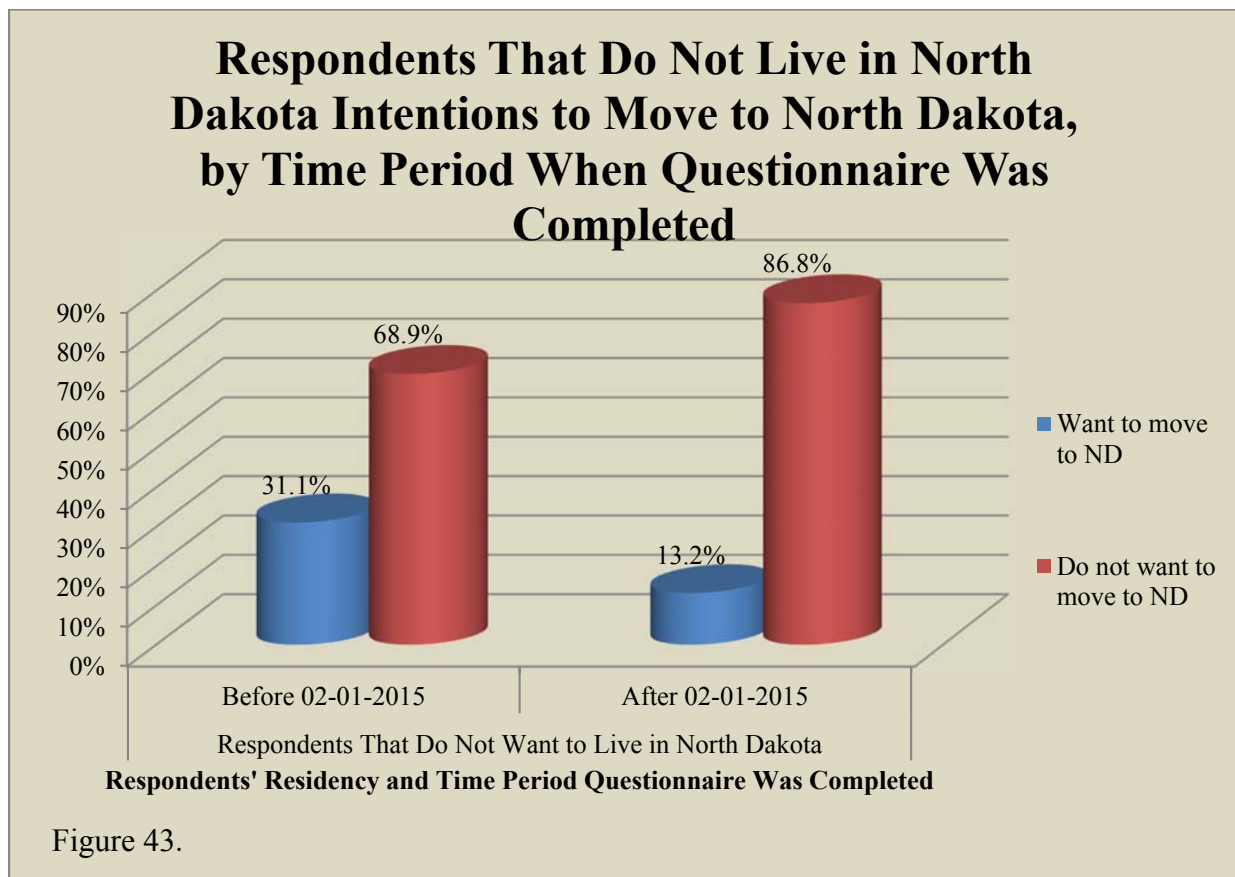
Respondents' that do not live in North Dakota intentions to work in North Dakota were also examined to determine if length of time respondents intended to work might be a factor in their intentions to not move to North Dakota. As previously reported, a large majority of respondents in both groups (want to move to North Dakota, do not want to move to North Dakota) indicated they intended to work in North Dakota for more than 3 years, however that intention was more predominate among respondents that indicated they want to move to North Dakota (Table 29). Eighty-five percent of respondents that want to move to North Dakota indicated they planned to work in North Dakota for more than 3 years compared to 66 percent of respondents that do not want to move to North Dakota (Table 46). Thirty-two percent of respondents that do not want to move to North Dakota plan on working in North Dakota less than 3 years compared to 15 percent of those respondents that want to move to North Dakota. Responses are detailed in Table 46.

Table 46. Respondents that Live Elsewhere Intentions to Work in North Dakota, by Intentions to Move or Desire to Move to North Dakota, Employee Questionnaire		
	-----percent-----	
Length of time intend to work or live in North Dakota	Do Not Want to Move to ND	Want to Move to ND
Work Seasonally	1.0	0.0
Less than 1 year	9.0	2.0
1 to 2 years	11.0	4.0
2.1 to 3 years	12.0	9.0
More than 3 years	66.0	85.0
(n)	(385)	(92)

Respondents' intentions to move to North Dakota were examined by the date they completed the questionnaire. Those respondents who completed the questionnaire prior to February 1, 2015 were compared to those respondents who completed the questionnaire after February 1, 2015. The analysis was done to see if the industry slowdown had impact respondents' intentions. The slowdown in industry activity as a result of falling crude oil prices had an impact on respondents' intention to move to North Dakota. Prior to February 1, 2015, 31 percent of respondents that do not live in North Dakota indicated they wanted to move to North Dakota compared to only 13 percent that completed the survey after February 1, 2015. The trend was similar for those respondents that indicated they do not want to move to North Dakota. Prior to February 1, 2015, 69 percent of respondents that currently do not live in North Dakota indicated they do not want to move to North Dakota. For respondents that completed the questionnaire after February 1, that number jumped to 87 percent (Table 47 and Figure 43).

Table 47. Respondents Intentions to Move to North Dakota, by Date Type of Housing Used While Working in North Dakota, Respondent that Do Not Live in North Dakota, by Date Questionnaire Was Completed, Workforce Survey, 2015

Item	Want to move to ND	Do not want to move to ND
	-----percent-----	
Before February 1, 2015	31.1	68.7
After February 1, 2015	13.2	86.8
(n)	(94)	(392)



Demographic Characteristics

Respondents that were North Dakota residents were predominately male, (75 percent). Nearly all of the respondents that live elsewhere were male (92 percent) (Table 48). Distribution by marital status was similar for both groups. Roughly two-thirds of respondents in both groups were married. Education levels were also very similar for both groups. Approximately one-third of both respondents that live in North Dakota and those that live elsewhere have a ‘vocational,

technical or 2-year degree’. Slightly more respondents that live elsewhere have a ‘high school/GED’ than respondents that live in North Dakota, 37 percent compared to 30 percent, respectively. Slightly more respondents that live in North Dakota have a bachelor’s degree than respondents that live elsewhere, thirty-three percent for North Dakota residents compared to 21 percent for non-residents. Generally the distribution for education was very similar for both groups (Table 48). Distribution by income was also similar for the two groups. Approximately half of the respondents in both groups had annual income of \$50,000 to \$99,999. Approximately one third of respondents had annual income of \$100,000 to \$149,999. Respondent’s incomes are consistent with high salaries prevalent in the oil and gas industry (Table 48).

Table 48. Respondents Demographic, by Primary Residency, Workforce Survey, 2015

Item	Primary Residence	
	North Dakota	Elsewhere
	-----percent-----	
Gender:		
Male	75.1	92.4
Female	24.9	7.6
(n)	(1,138)	(477)
Marital Status		
Single	18.0	15.9
Married	64.8	68.9
Significant Other	9.9	7.8
Divorced	7.3	7.4
	(1,127)	(473)
Education		
Some high school	1.1	1.1
High school/GED	30.0	37.2
Vocation, technical or 2-year degree	29.4	34.9
Bachelor's degree	33.5	21.6
Graduate degree	6.0	5.3
	(1,127)	(473)
Income		
Less than \$25,000	0.6	0.0
\$25,000 to \$49,999	9.1	5.1
\$50,000 to \$74,999	18.5	18.4
\$75,000 to \$99,999	31.2	35.7
\$100,000 to \$149,999	28.4	33.4
More than \$150,000	12.2	7.4
	(1,127)	(473)

Other Comments

At the end of the online questionnaire, respondents were given the opportunity to offer any other comments. The number of respondents that offered additional comments was exceptional. Clearly the questionnaire resonated with participants as nearly 20 percent of respondents offered additional comments. Generally speaking, very few people offer additional comments. While the overwhelming response provides a very unique database, the response was not expected. Coding and analysis of the data would constitute a separate analysis and is beyond the scope of

this study. However, respondents' additional comments are reported in their entirety in Appendix B.

Key Findings

Respondents that live elsewhere more often indicated their job description was related to field operations than respondents that live in North Dakota. Nearly 50 percent of non-residents indicated their job was related to field operations compared to 30 percent of North Dakota residents. Respondents that live elsewhere more frequently had jobs that were associated with oilfield development activities. Two-thirds of respondents that live elsewhere indicated their job was related to development activities compared to 48 percent of respondents that live in North Dakota. The distribution for respondents that live in North Dakota for jobs related to 'development activity' and 'production and operation activities' was nearly equal. Thirty percent of respondents that live elsewhere indicated their job was related to 'production and operations' activities.

Respondents that live in North Dakota most frequently reside in single family homes that they own (91 percent) and they were generally satisfied with the type and condition of their homes. A majority of respondents that live in North Dakota indicated they were either 'very satisfied' or 'satisfied' with the type (82 percent) and condition (74 percent) of their housing. The level of satisfaction dropped considerably when asked about the cost of their housing. Only 39 percent of respondents that live in North Dakota were either 'satisfied' or 'very satisfied' with the cost of their owned housing. Forty-one percent were either 'dissatisfied' or 'very dissatisfied' with the cost of their owned housing.

Respondents' views on the level of satisfaction with the type, condition and cost of the housing they rent in North Dakota were similar to those of respondents that live in North Dakota and own housing in North Dakota. Respondents were generally either 'satisfied' or 'very satisfied' with the type (82 percent) and condition (74 percent) of the housing they rent in North Dakota. While a majority of both respondents that live in North Dakota and those that live elsewhere were satisfied with the type and condition of the housing they rent, approximately 20 percent of respondents that live in North Dakota indicated they were either 'very dissatisfied' or 'dissatisfied' with the type and condition of the housing they rent. Over two-thirds of both respondents that live in North Dakota and those that live elsewhere were either 'dissatisfied' or 'very dissatisfied' with the cost of the housing they rent in North Dakota.

Respondents that live elsewhere more frequently reported living in employer provided housing than respondents that live in North Dakota. Fifty-five percent of respondents that live elsewhere reported residing in employer provided housing. Crew camps were the most frequently reported type of employer provided housing. Over 50 percent of respondents that live elsewhere reported

living in employer provided crew camps. Sixty-five percent of respondents that live elsewhere reported living in some type of temporary housing, such as a ‘crew camp’, ‘RV, modular, mobile’ or ‘job site housing’. Respondents that live in North Dakota but live in employer provided housing more frequently reported traditional housing as the type of employer provided housing. Over sixty percent of respondents that live in North Dakota who reside in employer provided housing reported living in either ‘single family home’, ‘apartment’ or ‘townhouse or condo’.

A large majority of respondents that do not live in North Dakota do not want to move to North Dakota. Eighty-one percent of respondents that do not live in North Dakota indicated they do not want to move to North Dakota. Personal considerations such as not wanting to move away from friends and family was cited as the consideration that most frequently influenced or totally influenced their decision to not move to North Dakota.

For those respondents that want to move to North Dakota, housing cost and price risk associated with concerns that the value of housing will drop in the future were the 2 factors that over 70 percent of respondents indicated influenced their ability to move to North Dakota. Lifestyle amenities, lack of social opportunities, weather and perceptions that public schools or daycare were inadequate or too expensive or that North Dakota was not a good place to raise a family had little to no influence on a majority of respondents that want to move to North Dakota.

Concerns over quality of life and access to essential services appear to be less of a consideration for oil and gas industry workers that want to move to North Dakota. For respondents that live elsewhere but would like to move to North Dakota, the cost of housing and the risk of housing values declining in the future were the considerations that most influenced their ability to move to North Dakota. Seventy-five percent of respondents that want to move to North Dakota said housing costs totally influences their ability to move to North Dakota, while only 50 percent of those that do not want to move to North Dakota indicated housing costs totally influence their decision to not move to North Dakota.

The relative influence of factors that influenced respondents’ decision to, or ability to, move to North Dakota varied by respondents’ desire to move to North Dakota. Issues related to housing cost and price risk more frequently totally influenced the ability of respondents that would like to move to North Dakota to do so. ‘Housing is too expensive’ was more frequently a factor for respondents that want to move to North Dakota than for those that do not want to move to North Dakota. Seventy-five percent respondents that want to move to North Dakota more frequently said housing costs totally influences their ability to move to North Dakota, while only 50 percent of those that do not want to move to North Dakota indicated housing costs totally influenced their decision to not move to North Dakota.

Other considerations more related to personal preferences and perceptions influenced respondents that *do not* want to move to North Dakota more than those respondents that want to move to North Dakota. ‘Do not want to move away from friends and family’ more frequently totally influenced respondents’ decisions that do not want to move to North Dakota than respondents that want to move to North Dakota. Thirty-nine percent of respondents that do not want to move to North Dakota indicated ‘do not want to move away from friends and family’ totally influences their decision compared to only 11 percent of respondents that want to move to North Dakota. “Climate is too extreme, too cold’ was also more of a factor for respondents that do not want to move to North Dakota. Thirty percent of those that do not want to move to North Dakota indicated ‘climate is too extreme, too cold’ totally influenced their decision to not move to North Dakota compared to only 15 percent of respondents that want to move to North Dakota.

There were distinct differences in respondents living arrangements based on residency. Seventy-five percent of respondents that live in North Dakota, live with a ‘family member, significant other, boyfriend or girlfriend’ compared to only 10 percent of respondents that live elsewhere. Alternately 50 percent of respondents that live elsewhere live with ‘co-workers, roommates, crew camps or dormitories’.

Respondents that live elsewhere generally work longer periods ‘on’ followed by longer periods ‘off’ and have longer work shifts. Respondents that live in North Dakota, most frequently worked 1 to 5 days ‘on’ followed by 1 to 2 days ‘off’ with work shifts that ranged from 8 hours or less to 12 hours. Respondents that live elsewhere most frequently worked 11 to 14 days ‘on’ followed by 6 to 10 days ‘off’ with a work shift that ranged from 11 to 14 hours. The predominance of respondents that live elsewhere who work longer work periods ‘on’ followed by long work periods ‘off’ and work longer shifts was consistent across all job descriptions and industry activities.

The three components of work schedules varied based on industry activity. Respondents with job descriptions related to ‘development only’ activities generally worked more days ‘on’ followed by longer periods ‘off’ and worked longer shifts. Nearly 60 percent of respondents with jobs related to ‘development only’ industry activities indicated working 11 or more days ‘on’ followed by 6 or more days ‘off’ with 67 percent reporting work shifts of 11 hours or more.

Work periods ‘on’, ‘off’ and hours per shift were more frequently 1 to 5 days ‘on’ followed by 1-2 days ‘off’ with shifts of 12 hours or less for respondents with jobs related to ‘production/operations activities’ only. Seventy-seven percent of respondents with job descriptions of ‘production/operations only’ reported work periods of 1 to 5 days ‘on’ followed by 1 to 2 days ‘off’ (78 percent) with work shifts of 12 hours or less (60 percent). Regardless of industry activity, respondents that live elsewhere worked longer periods ‘on’ followed by longer periods ‘off’ and worked longer shifts.

Respondents that do not live in North Dakota and do not want to move to North Dakota most frequently had a job description of ‘field operations’ (52 percent) and their job most frequently was related to oil and gas industry ‘development activities only’ (68 percent). Job descriptions and industry activities associated with those respondents that would like to move to North Dakota were more evenly distributed.

A majority of respondents (72 percent) that do not live in North Dakota and do not want to move to North Dakota reside in some type of temporary or non-traditional housing. Crew camps were identified most frequently (58 percent) as the type of employer provided housing used by non-resident workers. Respondents that do not live in North Dakota, and do not want to move to North Dakota more frequently lived in some type of temporary or non-traditional housing (74 percent). Respondents that do not live in North Dakota but would like to move to North Dakota more frequently lived in apartments than those that do not want to move to North Dakota, 34 percent compared to 14 percent.

Regardless of respondent’s intentions to move to North Dakota, a majority plan on working in North Dakota long term. Eighty-five percent of respondents that want to move to North Dakota and 66 percent that do not want to move to North Dakota indicated they planned to work in North Dakota for more than 3 years. Eighty-seven percent of respondents that live in North Dakota indicated they intend to live or work in North Dakota for more than 3 years.

Economic conditions appear to have an impact on non-resident workers decision to or intension to move to North Dakota. Prior to February 1, 2015 about 30 percent of non-resident workers indicated they would like to move and make North Dakota their permanent residence. After February 1, 2015 only 13 percent of non-resident workers indicated they would like to move and make North Dakota their permanent residence. Caution should be exercised when interpreting findings due to the small number of observations for those non-resident workers that would like to move to North Dakota. In addition, other considerations may have influenced respondent’s intentions, such as improving economic conditions elsewhere, personal considerations or other considerations not identified by this effort. However, the data would certainly seem to suggest that there was a change in workforce intentions that coincided with a downturn in economic conditions in the oil and gas industry.

Conclusions

Stakeholder Interviews

The stakeholder interviews conducted in 2014 were instrumental in identifying key workforce issues. Insights gleaned from the interview process were used to guide development of the workforce survey questionnaire and develop survey methods.

Despite the very different market conditions as a result of the rapid decline in crude oil prices in early 2015, many of the workforce issues identified in 2014 remained key considerations in 2015. Housing costs were still cited as an issue by stakeholders. Housing allowances and subsidies for both oil and gas industry workers and public service providers were still prevalent and were reported to be necessary to attract and retain personnel. While labor markets had improved and workforce turnover had stabilized; some industry segments still struggled with high turnover and workers for some skilled labor positions were still in short supply.

Perhaps the most significant change was the industry's response to price declines. The substantial drop in oil prices replaced a boom type mentality with one that was focused on cutting cost and improving efficiencies. While there were substantial layoffs in many industry segments, stakeholders indicated there was substantial voluntary attrition as a result of cost cutting measures such as reduction in hours and overtime hours. Many stakeholders suggested that many of the lost jobs were held by workers that did not live in North Dakota and they returned to their home state.

The slowdown was not universally viewed negatively. Both community leaders and some industry stakeholders commented that the previous rate of growth was not sustainable.

To what degree workforce issues that were identified in 2014 and 2015 will remain or change will depend on future market conditions. A continued slowdown may put downward pressure on housing prices and employers may continue to see a more stable workforce. A near term price recovery could lead to a ramp up of activity which could mean continued high housing costs and a return to a more competitive environment for personnel.

Workforce Survey

The disparity between the sample distribution and the actual distribution based on the participating firm questionnaire for respondents that live in North Dakota and those that live elsewhere combined with clear differences in characteristics and intentions of resident and non-resident workers makes generalizing findings to the total workforce difficult. Examining results

by residency, job description and industry activity provides a clearer picture of respondents' characteristics, preferences and motivations.

There were clear distinctions between respondents that live in North Dakota and those that do not live in North Dakota. The non-resident workforce more frequently performed industry activities related to 'development activities' and had job descriptions related to 'field operations'. Job descriptions of respondents that live in North Dakota were about equally divided between 'development activities' and 'production/operations' activities.

Respondents that live elsewhere have longer work periods 'on' followed by longer work periods 'off' and work longer shifts. A majority of respondents (81 percent) that live elsewhere do not want move to North Dakota. Personal consideration such as not wanting to move away from friends and family were most frequently cited as having considerable to total influence on their decision to not move to North Dakota.

Respondents that live elsewhere most frequently resided in some type of temporary, non-traditional housing while working in North Dakota and lived with co-workers or roommates. Respondents that live in North Dakota most frequently live in a single family home they own. While respondents that live in North Dakota are generally satisfied with the type and condition of either their owned or rented housing, they were more frequently unsatisfied with the cost of their housing.

The distinct differences between respondents that live in North Dakota and respondents that live elsewhere have significant implications for the delivery of public and private goods and services. The non-resident workforce largely uses some form of temporary housing and has no intention of moving to North Dakota. They will likely demand a different mix of goods and services and have different expenditure patterns than the resident workforce. It is possible that there will be some level of demand over the long term for some type of non-traditional housing to accommodate the non-resident oil and gas workforce. The type of housing demanded and living arrangements, for both the resident and non-resident workforce have significant implications for planning for the appropriate mix of housing and other public and private goods and services.

The large percentage of non-resident workforce related to 'development activities' also has substantial implications. Development activity has slowed considerably as a result of current economic conditions. However, if and when prices rebound and drilling and other development activities increase, the region could experience a substantial increase in a non-resident workforce.

While most non-resident workers do not want to move to North Dakota, a substantial portion of non-resident workers in the Williston Basin would like to move to the state and become residents. Housing costs and price risk were most frequently cited as the factors that influence

respondents that want to move to North Dakota ability to move to North Dakota. Policies and programs can be developed to address affordability issues and or housing prices may moderate making it easier for those worker that want to move to North Dakota do so. Other impediments that would be beyond the ability of the state to change, e.g., the weather, or difficult to change, such as inaccurate perceptions about the state did not weigh heavily on the decision to relocate.

Focus Groups

Focus groups were used to identify issues and gain insight into the perceptions of individuals who have recently moved to North Dakota. While some themes, such as cost of housing and lack of quality of life amenities and the need for expanded public and private goods and services were identified at each of the focus groups, other issues varied depending on the community. While the community response to the challenges associated with oil and gas industry growth varied, participants identified positive things that have been done or are underway to address challenges associated with rapid growth in the oil and gas industry. Focus group findings are not generalizable to the larger population. Findings, however, do provide insights into how new residents view their community's strengths, weaknesses, successes and areas that need improvement.

Implications

There are two distinct workforces in the oil and gas industry with different characteristics. They have different work schedules and patterns, characteristics and they use different types of housing. Further, the non-resident workforce is concentrated in jobs related oil and gas industry development activities which could suggest surges of non-resident workers that correlate with development activities that are driven by market conditions. It is possible there will be a non-resident commuting workforce in the state over the long term. Seventy percent of respondents that live elsewhere (do not live in North Dakota) indicated they plan on working in North Dakota for more than 3 years. All of these considerations have implications for the planning and delivery of current and future public and private goods and services. The potential for a long term presence of a non-resident workforce represents a substantial change from the historic characteristics of the workforce in North Dakota.

Need for Further Study

The assessment of the characteristics, perceptions and intentions of the oil and gas industry workforce should be ongoing. Regardless of the recent slowdown, thousands of new jobs have been created, many held by people that have moved to North Dakota from elsewhere. This was a first attempt to describe the oil and gas industry workforce. Especially in light of the recent slowdown in industry activities research activities should continue. State and local leaders,

business and industry leaders, developers and entrepreneurs will need to adjust to how the slowdown in industry activities impacts workforce characteristics, perceptions and intentions as well as the delivery of current and future public and private goods and services.

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Appendix A

Appendix Table A-1. 'Other' Responses Table 9, Activities and Services Associated with Job Description, Workforce Employee Questionnaire, Workforce Survey, 2015 ¹
Land
Safety
Office
Delivery truck flat bed
communications
fleet management
Trucking
All the above
oil field service company
Fleet manager
Electrical instruments
disposals
Payroll/Paperwork
semi truck mechanic
Information Technology
Billing for trucking company
office, clerical work
BILLING
trucking oilfield fluids
Maintain equipment - tractors and trailers
water/fluid hauling
Lab
Wire line
Wireline
acidize wells,clean out wells
product supplies for wells
Chemical Handling
nursing
Warehouse Operations
Material Handler
testing frac and cement
Cement casing
Testing of cement, obm, frac gel
Procurement Specialist
Cement
Supplying product to Frac in field
vehicle maintenance
Warehouse
dig flow lines and build tank batteries
Office
Line location

Appendix Table A-1 (cont.). 'Other' Responses Table 9, Activities and Services Associated with Job Description, Workforce Employee Questionnaire, Workforce Survey, 2015¹

maintenance supervisor
filing, Accounts payable coding, fleet management, greeting vendors, answering all incoming calls to williston office
Environmental
IT Support Administration
Maintenance Management
Environmental
HR
Safety
Safety
Accounts payable work
Cased Hole Wireline
ADMIN. ASSISTANT
IT procedures
Human Resources
Safety
landowners
wireline/farrier
wireline
wireline
Cement Design
Field support, equipment maintenance and building
Well Cementing
equipment maintenance
laboratory testing cement and frac fluid systems
Equipment Maintenance
pump maintenance
Network infrastructure
Zonal Isolation, cementing casing
mechanic
Equipment Maintenance
Cementing oil hole
Real Estate Property Management
service company
Security Industry
Equipment Repair
haz waste
Support services IEM
Lab testing for frac and cement
internal equipment maintenance

Appendix Table A-1 (cont.). 'Other' Responses Table 9, Activities and Services Associated with Job Description, Workforce Employee Questionnaire, Workforce Survey, 2015¹

maintenance
material handler
Service industry - we service the wells
machanic
support service
Equipment Maintenance At Facility & On Location
Perforations
invocing
Procurement/Supply Chain
HR
Supply Chain Management- Procurement
Rental and inspec
OILFIELD TOOL RENTAL
electronics
Sales of down hole equipment
Finance admin for servicing co.
Managing drilling & production equipment
Well Evaluation
Logistic Service's
Management
Mantenace on all intrument and Electrical equipment
Sup/Operator
Procurement
Warehouse
oil field safety
Sales
Health & Safety
Asset managment & External Relations
supply chain materials management (yards & warehouses)
Office Personnel who supports all of the above
Global Supply Chain
Well Site Construction
Facility Maintenance
document controller
continuous improvement of the above processes
IT
Environment, Health and Safety
Safety
Office Clerical work
Ground Disturbance

Appendix Table A-1 (cont.). 'Other' Responses Table 9, Activities and Services Associated with Job Description, Workforce Employee Questionnaire, Workforce Survey, 2015¹

Support services for all of the above
plant operator
Accounts payable for all areas in the business
Support
Negotiating and contracting nat gas processing and oil and gas pipeline transportation
Lean Manufacturing
Land, negotiations, right-of-ways, minerals, royalties, landowner relations
Reporting
I support groups that do all of those activities.
Safety
Regulatory Permitting etc.
Regulatory
IT
Finance
Supply Chain Services for all mentioned fields
truck maintenance and mechanic
Safety
Safety
training
maintaning equipment
Making sure truck drivers stay in compliance
Safety
safety
Information Technology
invoice paperwork
swd
Billing
transportation of equipment
Workover rig dept.
compliance rep
Drafting well site preparation
solids control
financial institute
Office
Solids control
Surveying
CAD Drafting
real estate
Insurance
GIS Data for all above

Appendix Table A-1 (cont.). 'Other' Responses Table 9, Activities and Services Associated with Job Description, Workforce Employee Questionnaire, Workforce Survey, 2015¹

crude oil transportation
Ensuring HOS Compliance
from beginning to end
Meter calibration
human resources
hauling salt water
tax compliance
paper pusher
Public Relations
sales
haul crude oil
Energy Services Software
fluid transportation
field safety
Information Technology
Safety, Injury
Administrative support
Keeping Trucks on the Road
anything billing related
Solids control equip maintenance
HSE manager
Driver support, dispatch
Parts inventory
Solids and fluid recovery on rig site from drilling
Human Resources
Compliance of proper oil buying procedure and eliminating spills
Well site fluid services
ppe
Building and yard Maintenance
Payroll
Office support
Safety and field logistics
safety
Rig repair/maintenance
truck pusher & trainer
Safety /Driver support
housing maintenance
Teaching new hires
Site inspections
IT Support

Appendix Table A-1 (cont.). 'Other' Responses Table 9, Activities and Services Associated with Job Description, Workforce Employee Questionnaire, Workforce Survey, 2015 ¹
Solids control
Land and Right of Way
¹ Responses are reported verbatim.

...

Appendix Table A-2. 'Other' Responses Table 23, Degree that Various Factors Influence Non-resident Workers Ability to Move to North Dakota, Respondents that Want to Move to North Dakota, Workforce Survey, 2015 ¹
Drugs crime etc.
Wages are falling
Cost of living is fairly high
Limited club sports opportunities for kids (Volleyball, baseball, football etc.)
You know the answers you were gonna get you asked so far the right questions because you know as well that everything is missing or expensive
the greed of the companys operating in the bakken
Work will not move me
main reason: Price of housing / quality the houses are built
The current boom bust cycle too unstable to move family here
Healthcare is terrible
My job may be pipelined
the greed of most land owners
Boom is gone
high cost of food and other items compared to cities even 50 miles away from oil patch
Health care is totally inadequate
¹ Responses are reported verbatim.

Appendix Table A-3. 'Other' Responses Table 25, Degree that Various Factors Influence Non-resident Workers Decision to NOT Move to North Dakota, Respondents That Do Not Want to Move to North Dakota, Workforce Survey, 2015¹

lack of available females
selection of housing
Dangerous Work
Crime
Local people are rude
Mountains
Cost of Living
everyone price gouging
shared custody of our daughter
No Mountains
cost of living
essentials
Western ND isn't safe
cant afford
to live here
job stability
diversification mfg and industry too many eggs in one basket here
lack of nice clothing brands stores
People are very Prejudice
Kids in High School
When the oil boom is over, there will be nothing left here.
Infrastructure is lacking
I like where I live
oil prices
Commute 35 miles
to short on doctors afraid for my familys LA k of health. care
North Dakota is not far from my permanent residence
OWN A HOME IN MINNESOTA
I already have a mortgage at home
No outdoor activities, dangerous bike riding and running
The lack of Mountains and forest land nearby
i lived in ND for most of my life, i luv ND
Crime rate
I am divorced and do not want to lose anymore time with my kids by not living close to them
employer may eliminate me at any time
tooooo Flat,Windy.no trees Duh
cost of living is outrageous and a lot of it isnt occupied
Medical specialists that are necessary for my daughter are not available
already own my home,no desire to go into debt

Appendix Table A-3 (cont.). 'Other' Responses Table 25, Degree that Various Factors Influences Non-resident Workers Decision to NOT Move to North Dakota, Respondents That Do Not Want to Move to North Dakota, Workforce Survey, 2015¹

WIND
Oil booms are not stable and cannot be planned on
Its practically Canada
don't know how long this will last
I just bought a home in Washington
Wife is in school
Crime
Wife makes more money in Houston
Greedy homeowners
I work in Denver office for ND company
My exwife lives in Idaho and I don't want to be away from my kids.
hunting privlages suck
I am local, I live 5 blocks from N.D.
Montana is home
My daughter has serious medical needs and local hospital are inadequate
Oil industry instability
where is the nearest pine tree
Flights to and from Houston, TX are Ridiculously Sky High!
Nothing to do anything outside of work!
Own Home in Montana
I grew up in ND & I prefer MT
lack of out door recreation. ie. motorcycle trails, mountain biking, mountains in general
Drugs
Food & clothing too expensive
Deadly drivers (roads)
cost of living
services, utilities, auto repair, etc.
housing vto costly
less weather pollution
Not a fan of the landscape
House in Montana is paid off. Who wants to start payments again? There is a real fear the boom could bust leaving property owners with houses they can't sell and taking a huge loss.
Kids have grown up with friends
CRIME/Unsafe for children
WHEN the boom fails the poor souls who purchased homes here will be upside down in debt.
I like trees
Cant afford to live in ND
The Boom will Bust

Appendix Table A-3 (cont.). 'Other' Responses Table 25, Degree that Various Factors Influences Non-resident Workers Decision to NOT Move to North Dakota, Respondents That Do Not Want to Move to North Dakota, Workforce Survey, 2015 ¹
Greedy business owners
to many people already in western north Dakota
I am within driving distance to my line of work.
The hospitals are not even close to what we are used to in Houston, TX and I have a High Risk pregnancy so that influenced my decision to return early to Texas.
Montana is preferred place to retire
¹ Responses are reported verbatim.

Appendix Table A-4. 'Other' Responses, Table 25, Importance of Various Quality of Life Considerations, North Dakota Residents, Workforce Survey, 2015 ¹
Recreation for children in the winter months
Gasoline and diesel costs at the pump
ND needs more in state owned oil and fuel refineries
Worker shortage
Updated public infrastructure
Weather
Professional Development & Networking Opportunities
Church & Faith-Based Activities
Hunting Areas/Wildlife
Fishing/Camping
work/life balance
back yard chickens
actions on traffic issues that are more in line with the future needs faster
Infrastructure
Affordable air transportation
Being able to help my sick parents more often
Employment Opportunities
Proximity to family
Laundry services where I live
Quality of Life
Chain Restaurants
Community Involvement or Volunteering
Bowling Alley for kids and families to hand out
Churches
Near other Family Members
Laundromat
Clean streets
Friendly Businesses
Pollution & Litter
Taxes
Child activities
Gym services
roads & street repairs
wages
Roads/infrastructure
cable/internet
ND Blue Law Issues
Wellness, fitness, sports
Airport connections
Proximity to work

Appendix Table A-4 (cont.). 'Other' Responses, Table 25, Importance of Various Quality of Life Considerations, North Dakota Residents, Workforce Survey, 2015 ¹
What the people are like
Outdoor recreation opportunities
Sport activities for kids, such as decent pool(s) for swimming teams to train and host competitions
ND Pay scale
Home services availability (housekeeping, lawn care, etc...)
Near to family
support for home school
Public maintenance, roads, sewer, etc.
Safe/Quiet Neighborhood
Equine Accomodations
lights
quality of food
quality of water
Weather
Access to international flights
recycling center
Down town Stores need to be open on Saturdays as I person who works monday to Friday can't help surport them as they are closed so we drive to Minot
Infrastructure
Accessibility to Transportation - Aiport, Rail, Etc
Parks
ASD Support
More shopping venues
International Airport
Motocross track
Outside rec.(tracks, etc)
Services
privacy
open land
Quality Housing
Quality Education
Public school buses
Public Lands with Trees Mountains
Reduce the number of mancamps
Rental cost is ridiculous affordable rent
Church
Job opportunities/satisfaction
Future Development
Affordable Flights
Road Quality

Appendix Table A-4 (cont.). 'Other' Responses, Table 25, Importance of Various Quality of Life Considerations, North Dakota Residents, Workforce Survey, 2015 ¹
Planning & Zoning
City Leadership
Shooting range"long range"
Community pride
Just cleanliness of the city
Over priced food
Price gouging
Air Service
City clean up
Drug and alcohol abuse
AFFORDABLE HOUSING
Communal Unity
public space
Churches
Agriculture opportunities
Children/Youth Activities
Affordable single family homes
Community Volunteer
Road conditions
Property taxes
Public Transportation
A shopping mall
Womens clothing
Infrastructure
public transportation
Fast internet :) (gaming, netflix, work)
property taxes
EPA regulations
Close Airport proximity
having a yard
50,000 apartments not by my house
local Airport
Crime
Being Close to Family
Air quality
Traffic noise (Trucks, planes)
church
Condition of streets in my neighborhood.
Motor Sports
commute to work
Cleanliness of community
¹ Responses are reported verbatim.

Appendix Table A-5. 'Other' Responses, Table 29, Factors That Would Influence Respondents Intentions on How Long They Plan to Live or Work In North Dakota, Respondents That Live in North Dakota.¹

Born here won't leave
better access to food for special dietary needs, especially gluten free
If my family decided to want to leave I would go.
My parents health, my wife and kids health. I will do what is necessary in best interest of my family
Family services connected with living in the area
food, shopping, entertainment
love it here Born and Raised
Political Policy Changes
Moving to eastern part of state
Friendly customer service
No leaving nd family all here
Crime & Quality of Life
Traffic Flow
If the state government keeps caving in to the oil companys like cowards I would think about leaving. There needs to be oil extraction, but it must be done responsibly at a pace that communities can support.
retirement or if kids move
pay off my rv
If work stopped Or rates came down I'd leave
If my family wasn't here
Work and pay remain stable with drop in oil prices.
Fitness, wellness center
Job Transfer
Higher quality pre-college education (k-12)
Property taxes
If the rate of people continue to move into my home area I would be tempted to leave
Send all the transients back to where they came from.
less expensive local shopping
More connecting flights/airlines
Not Leaving, been here 33 years
Less "Riff-Raff"
better weather
cost of living
Current employer transfer me to other locations
Improved traffic
Job with company

Appendix Table A-5 (cont.). 'Other' Responses, Table 29, Factors That Would Influence Respondents Intentions on How Long They Plan to Leave or Work IN North Dakota, Respondents That Live in North Dakota.¹

Job layoff is the only reason we would move
US Visa restrictions
company transfers us
Airport/Travel oportunities
I'm a native
Cheaper Property taxes
Safety Job
A chance to actually be paid well
far from extended family
career options
Affordable flights to see family down South in Texas.
Public School Transportation
Cheaper flights from Williston.
A mall
Better school options.
moving closer to family
Access to cheaper airfares/travel options
loss of job
Keeping the job
depends on how long my company needs me here in ND
My daughter is 5 months if the Williston school system does not get better we will be leaving before she enters school.
More enjoyable job
Affordable day care so my wife could also work
If it goes bust, and can't afford my mortgage
Potentially replacing current income with direct sales. Would still live in this area as my husband was born and raised here.
LIFETIME RESIDENT
A more honest and fair employer
More public hunting land
na
family opportunities elsewhere
Move if my job is cut
Property taxes too high
Falling Oil Prices
Family
Single Women
Poor Schooling for my kids
if deep wage cuts continue, i would leave quickly
More retail shopping availability

Appendix Table A-5 (cont.). 'Other' Responses, Table 29, Factors That Would Influence Respondents Intentions on How Long They Plan to Leave or Work In North Dakota, Respondents That Live in North Dakota. ¹
Cheaper flights
Too far from home
Cheaper airfare for vacations/visiting family
Better roads and streets
Family
Affordable cost of living (food, etc.)
not being able to purchase a home. would move from my homestate to do so.
I'm lifelong resident
If my family moved here
New interesting opportunity with my employer
loss of job
Very Happy Here In North Dakota
job security
lack of work/money
State Economic condition such as oil price and impacts
Motor park
lived here since 1950
Paid 1.5 hr drive to work
¹ Responses are reported verbatim.

Appendix Table A-6. 'Other' Responses, Table 30, Percent of Respondents That Indicated Various Factors Would Influence Their Intentions on How Long They Plan to Live or Work in North Dakota, Respondents That Live Elsewhere, Workforce Survey, 2015¹

Cost Benefit Analysis
hobby farm like at home
Make it warmer in the winter :)
Job closer to home that pays more
Family health
Better roads, & road maintenance
Rent is too Expensive
All the above
mountains
more positions for professionals with worldly experience
retiring soon
market forces oil prices industry diversification
Family
Schools
Competitive Club sports opportunities for kids
None
Hunting regulations suck for a non resident
Waiting for kids to graduate High School
More mountain bike trails in the Badlands
work would move me
moving away from family
my family moves here
How long the work lasts here
2 week on, 2 week off rotation for more time at home
As long as there this company housing/mancamps I plan to work here. If this bennefit is lost it makes much more sense emotionally and financially to find work at home.
Better winter road maintenance, do not care about retail
if i could get a state id without giving up my colorado license (part time residency)
The price of oil will have more to say about how long I work in North Dakota.
Lower pay
Back to original schedule 2x2
375 an hour
Closer to wife who is the breadwinner in the family
I want to be in a quiet safe nieghborhood or find a nice farm or piece of land to park an RV on, I want to bring my dog here from home and make this my primary residence.
Home and business owners that did not screw everybody just because people are making good money to support their family's on
Sidney MT

Appendix Table A-6 (cont.). 'Other' Responses, Table 30, Percent of Respondents That Indicated Various Factors Would Influence Their Intentions on How Long They Plan to Live or Work in North Dakota, Respondents That Live Elsewhere, Workforce Survey, 2015¹

I only come up 3-4 times a year for a few days to train.
lower food prices
N/A
Mountains and trees
Talk my wife into it
I would not live in ND again
cut rates equal less pay
I don't really see myself living in ND
Only if necessary
¹ Responses are reported verbatim.

Appendix Table A-7. 'Other' Responses, Table 31, Living Arrangements, by Primary Residency, Workforce Survey, 2015 ¹
Live in and own my own house in MN
Don't live there
i live in minnesota and stay with my parents in minot while i am here working
I visit ND 1 week out of each month
Bought land in SD cheaper
work remote and travel
occassional visitor
own mn
NA
Apartment wanting to move family here but prices suck
I do not live in North Dakota
Better housing
Commute Daily to Montana
Live in Montana but commute to Williston everyday
family and roommates
the shag carpet in my van
Sidney MT
Hotel when I'm there
live out of state
MN
live in montana
Don't live in North Dakota
live out of state
peterbuilt in company yard
Live inside my truck
Live inside my truck
Live in semi
live in truck
in a truck
¹ Responses are reported verbatim.

Appendix Table A-8. Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I was not able to afford a house with land for my dogs similar to what I had before I moved to North Dakota. I would be staying in North Dakota if I had a house with land and access to good veterinary care and dog training.

My wife and I are both native to ND with our families here, so do not appear to be the target of the survey.

I like ND I just arrived to late.

Housing and rent is ridiculous for area. Travel to and from work is 3 hours non payed. Highways are not cleaned or ice melt put down often enough. With this lack of importance on highways, several accidents occur leaving people stranded or hospitalized. I have never in my past seen so many accidents on one road just in the few months I have been here. Road conditions are not being addressed in timely manners.

You'll have a state income tax. / WY does not!

Not many of these items affect me. We have lived in this area of ND since I was born, own our home and my commute to work is about a half mile. What I hear and see relating to those who came here for work and support their families, Housing/living cost are the main factor for families to stay and or survive. Some spend half their income on rent alone. This also hurts people on fixed incomes, especially our older folks. With higher wages paid to hire people, naturally the price of items increased to cover wages. Quality of the local school system is a major concern for families with children, along with safe/quality day care that will accommodate schedule changes. Commutes to work are strongly related to what a community has to offer for the person or family. What I see in New Town, those who come here to work, usually will not stay and live in the area very long. They move to Minot, Watford City or Stanley.

living in ND is so expensive and it would be better if we can build house and more recreation areas so we can have fun the days we are not working other wise people will go somewhere they can enjoy and spend some money.

Due to high cost of living, in addition to lower pay rates (price per barrel, etc) not worth being up here...although the roadways are being vastly improved (much appreciated, yet way overdue)...until the oil prices rise and stay at least \$80/barrel, then i'll enjoy working up here again

Tioga and Williams county seem to have a higher than average tax for Sales and Property., combine this with a State income tax and it's easily double of that in Wyoming. Another issue is there is an excise tax required on vehicles purchased in another State such as Montana, regardless of how long the vehicle has been owned. This is outrageous. If an individual has owned a vehicle for a couple years and moves to North Dakota, that person is required to essentially pay a sales tax on a vehicle they have owned for some time. Absolutely ridiculous !!

I would like to see less apartment complexes being built, if I move from North Dakota it is because I am afraid of the housing market dropping and not being able to sell my house. I do enjoy seeing more restaurants being built.

I would have seriously considered purchasing a home in Dickinson, but the same quality of home in Bismarck cost \$50k - \$70k less.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015 ¹
I came to ND knowing it would be short term (< 3 years). Quality and offerings of Dickinson high school system absolutely influenced our family decision not to relocate to ND. (I have a graduating 2016 senior in WY) Per my long established career plan I will be retiring at the end of the year. The time in ND has been interesting and enlightening. ND people are great folks in general.
Williston needs lower cost housing, more diversity entertainment, more restaurants
Beautiful summers, brutal winters. It has been my absolute privilege to "commute" throughout ND supplying frac sand. If the money was still here, I would be too, no ques. Just cant justify the sacrifice for the reward.
Even before the oil field ramped up prices for goods and services were high here. Quality healthcare has always been a problem. And there really was no housing pre boom. My Husband came to Williston 10 years ago for non oilfield related work I followed him 3 years later. Both of us found ourselves in the oilfield out of necessity and in fact found ourselves in a borrowed camper to live due to the greed of the native residents but we survived. Children followed us to Williston and have also put down roots. SO it wasn't all about boom and bust of people following the high dollar. /
None at this time.
I would love to see rent on apartments and houses come down to an affordable level. I see no reason a family should have to spend \$2,000 or more a month just for an apartment or home to rent.
the housing is so expensive, that employers are FORCED to pay higher wages just people can survive. If housing was gauging everyone, more business could operate and enrich the area, but as it stands, the sheer greed is forcing employers to pay high wages, which lowers their ability to expand and hire more people.
I am sick and tired of all the camper villages. All the sewer trucks pumping everyday, all the trash because of over flowing dumpsters. Insulation blowing all over the community because no one cares that lives in the area. No one plans on sticking around so they don't care!!!!
NONE AT THIS TIME
HWY 23 CONSTRUCTION PROJECT FROM NORTH END OF 23 BYPASS AROUND TOWN TO 1806 IN WATFORD IS A MESS. I HAVE A PICKUP AND QUIT DRIVING IT BECAUSE IT IS NARROW AND NOT
Along with the growth that NORTH DAKOTA has been blessed with, I now have to lock down, put up motion lights, pay more attention to who's around, it's very concerning to me. I am a native of the state, I work in the oil and gas industry and often ask myself if the trade off is worth it. Have a safe day!
Gauging in North Dakota needs to be controlled in the Bakken area. I like North Dakota and since I been out of the Military it is the best place I found to live so far. I am relaxed here I just don't like gouging.
I lived in Williston for 22 years and I would not live there again because the town is no longer a safe place to live. I don't even shop there anymore.
I am a NDSU engineering graduate that is grateful to work in the state. There are a couple of us in the company.
Does amount of family members include yourself? Not clear.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Ultimately, while recreation, amenities and cultural opportunities would make me more likely to stay, I am not likely to stay because I foresee that I will need a new challenge in the medium term.

North Dakota is great. I am from Texas and would love to continue to live here in Dickinson, except for the distance from family. Thanks!

I would really like to be able to only have to work 48-55 hours a week and make the kind of money a person does in the oil related industries. I grew up in Minot and was raised on a grain farm with custom combining in the mix for 25 years . Really miss the opportunity to be able to earn a living in the agriculture industry. Living in North Dakota is the best it is just unfortunate that greed has taken over in the mindset of so many individuals and companies now that the oil industry is here in full swing until the slow down. I believe housing needs to concentrate more on affordable single family homes and get families to move to ND instead of apartment living. Communities are built on neighborhoods not apart apartments.

Watford City North Dakota is a wonderful community and if we were not close to retirement we would like to stay here for a longer work life. Hopefully, the influx of people will not destroy the hardworking, family values this community has. / / A great place for people to raise a family.

As soon as the time is right I plan on selling my overpriced house and leaving North Dakota never to return. I do however like to tell the natives of North Dakota that this really is the greatest place on Earth so they do not leave North Dakota and end up living where I want to live.

Technically, I would not want to live in a smaller or larger community than Williston. I enjoy the size of the town and appreciate that it doesn't take much to get out of the city limits. I do wish there were more recreational things to do and that I wasn't so timid on going out on the town since I'm a female. I wish there were some way of applying to a newsletter to receive information on town events that were family friendly (indicating that women are safer in that type of atmosphere) so that we could get out of man camps on weeks off if we are intending on living here permanently.

Community garden space would be wonderful.

Housing is expensive especially if a person is forced to rent company furnished housing by themselves because of lack of roommates or if hours and overtime have been cut due to a slow down with the employer. If hours and overtime are cut due to an employer being forced to withhold pay because of economic hardship then the rent costs to that employee should also go down. Afterall most housing in North Dakota are job shacks, mobile homes, or modular homes that are also expensive to heat in the winter due to the furthestmost climate of the state.

everything has been being built to suit single people, I miss the family oriented Williston.

Cost of living is slowing changing our minds to living in a North Dakota community, and the factors going into this range from Housing and Food Costs to even inflated basic health care such as Optometrist or Dental care. My job wages are more than fair, I don't think it's the business' jobs to inflate wages, I think it's the community's job to bring cost of living down, starting with mandatory (requiring 1 out of 20 apartments built or something along those lines) low income housing, for our grocery and fast food workers. If the grocery market doesn't have to pay \$4/ hr extra stipend for the oil field, then the market wouldn't feel the need to inflate food prices 80-90% above cost.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Living in Stanley ND is ideal. Except the price of property and rent. I feel we are raked over the coal for the price we pay. 1000 for a 3 bed 1 bath in a trailer park. Other states a person could have a 2 story on 5 acres for that price. Its price gouging!!! And should be mandated. Just because we make good money we should not lose it to rent and make others rich off our hard work.

It just cost to much to live in nd.

would be nice to have a big outdoor pool with extra activities for the kids in town.

Concern about the falling price of oil that will surely affect the tenure of my employment.

I am a native of ND and love it where I live right on Lake Sakakawea. The one answer I gave concerning if I would rather live closer to work even in a small community or rather live in a larger community even if I would have to drive longer distance to work. Neither answer was correct but I had to give one to keep going so discount that question.

I would like to see more of the money that comes from Williston taxes to be spent in Williston rather than North Dakotas Larger hubs. Also traffic safety is some of the worse I have seen. Before moving here I lived in Seattle for 30 years and didn't care for how expensive tickets were or how cops set up traps everywhere. But Seeing how people drive and the deaths caused by it because of the lack of consequences, I would welcome higher fines and better patrolling of traffic violations. Also, the way a lot of the roads are set up especially during constructions leads to believe there is a lack of safety planning

I Would permanently move to North Dakota if my income would support my owning the family farm, at home and owning a hobby farm acreage of 160 to 240 acres in North Dakota. I have learned to find the good in this state while I have worked here. / North Dakotans are good people with good core values and this is a good state. I have attempted to bring my family members out here on vacation, but as of yet it has not worked out.

My income is borderline this year. The company I work for offers Housing subsidy which puts me above the \$75000 bracket which could be dropped any time. I'm born and raised in North Dakota and strong family ties ensure I will stay in the state regardless if I have this job or move to another. I've been at my company for over 9 years now. I think the Williston community can be a better area if we supported our local law more. They are overwhelmed with local crime and not paid well for it. However I don't fear my local area either. Obviously when you get an influx of people you get good with bad(transients, drug dealers, and human trafficking). Almost everyone that I've met here has the good old family values mentality and are people who will stop at nothing to make sure they don't fail. Lower rents would help a lot of the employees that work for us greatly and would help me as well to get a more local work force working.

The businesses in Williston area has the cost of living there so high that nobody wants to live there . Why buy a home in a place you can't afford to retire there

Real estate prices are high and if the down turn in oil prices continue we may not have work. Uncertainty about markets and oil doesn't make a guy want to uproot a home.

It is difficult to live and stay in an area that has little or no recreational, entertainment or shopping places. If you have time off you're going to want to leave so you have something to do.

With all of new housing that is being built the rents should be reduced to match national average

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I live in a nice community. My family is there along with my wife's family. They have good schools with lots of opportunity for my kids. Williston is not a place I wanna raise my family. To much traffic, to noisy, and I prefer to live in Wyoming. It's cheaper to live there and comute.

I feel that the people in the community are very nice for the most part. There are just not enough trees in this part of the country for my liking.

North Dakota is a nice place but I have a nice place that I don't want to leave

I'll be out here as long as my body can handle it!

The first influence is the lack of social amenities available here. Its understandable the winter is extreme, then why not take advantage and have more winter activities available for families? Snow mobile activities ice skating etc. are a few ideas. We did not get to go to Regina, Canada but many of our acquaintances have gone and loved the amenities there that Williston isn't even close to having. Regina is the middle of nowhere Saskatchewan, Canada how is it possible they have so much to offer? Another issue is how Dirty Williston is from all the sand that is put out for the ice and snow! I have never seen such a filthy city where your boots are filthy just going from car to grocery store! Housing and day care services are Ridiculously priced! We own a 2000++ sq. foot home in Houston in a Master Planned community for \$215K and here houses cost \$300K++??? Ridiculous! The day care options are minimal and sky high prices, not everyone here is making loads of cash! I know my spouse and I are not! We came up here for opportunities but the sky high prices of living are sending us home running! Additionally the prices for flying to Houston are Outrageous! We would love for our family to come visit us but at \$1k++ per ticket that was Impossible so that was a major discouragement for us. Family is important to us and being able to fly to see each other a few times a year is a major factor. My husband and I had to drive to Denver, Colorado to catch a flight to Houston because it was still cheaper than buying tickets here in Williston. The winters are extreme here compared to Houston, but that did not even deter us! We purchased the Under Armour to layer with our clothes and got ski jackets too! The cost of living is what is sending us packing and running home at the end of summer. Which is truly a shame as we thoroughly enjoyed being a part of this community and had planned to originally stay 2++ years. Please improve the Hospital and Doctor Availability I know that was the #1 Factor once I was categorized as High Risk Pregnancy. THANK YOU!

nothing for families to do here build new movie theater bowling alley. And bring in one huge larch or pine tree. Build another golf course, bring in Safeway. Bring in taco bell, Wendy ,burger king.

Overall cost of living is much higher in Bakken. Oil field workers specifically targeted for higher rent rates. There is more than enough housing available now.

I think that affordable rental properties are mainly what people are looking for at this point, if anything, because of the uncertainty of the oil industry. Access to quality, affordable apartments with shorter leases may entice people to move into their own place in this questionable time, but it may end up hurting these small communities later if there is a great excess of housing and the bottom falls out of the oil market.

Na

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

retailers, vendors and stores take advantage of the situation and have 15 to 30 higher price compared to stores even 50 miles away. Housing prices are out of control my 3 bedroom apartment shared with 5 people is 2460 where as a similar arrangement in glenn uln is only 1200 per month.

I live in a man camp and it is the most sensible place for me to be. However, I am dissatisfied with my employer and am looking for a different job. I enjoy working in the oil field but I do not have enough time off.

I love Montana, North Dakota is great State with lots of opportunities and beautiful landscape. Montana is where I am at home.

Born and raised in ND and I hope to stay here my entire life!

bring back the oil prices please

if a job was offered 14 days on and 14 days off with benefits and income close to what I make now I would take it.

I prefer smaller communities (Grew up in Wyoming, farming background). Williston has a ton of opportunities; my wife was able to get a great job accounting/payroll/Acc.Rec with a "soft" degree (Intl Studies w/ religion minor) with some charity fund experience (Community Foundation). Housing prices are coming down; most companies are helping pay or providing subsidized housing for employees, which is nice, but many realtors are charging insane prices or having stupid contracts (if breaking lease, have to pay 6+ months rent, etc), which made buying a house in town attractive. While it was constructed in a hurry (4-6 months) it's been sufficient and cheaper than paying rent. We really dislike the cost of travel; visiting family is a minimum thousand-dollar expense. It also sucks that many people don't regard Williston as "home", so making friends has been discouraging; chances are they are gone in six months, so we tend to gravitate to "old" friends from college and interact online (I game with them, she skypes) and we watch a lot of streaming services (HBOgo, Netflix) because entertainment is quite expensive and going to Minot every weekend is out of the question, financially. The quality and quantity of both housing and entertainment options has exploded in the last year or two, which is super nice, and there's lots of families living in our area (so many pregnant women!), and I've heard the school districts are overloaded, but we don't plan on having kids so it's just rumor to us.

Eventually we plan to leave for northern Colorado area, as our parents are becoming elderly and travelling to and from Williston is just untenable for emergencies. I like Williston a lot, I love my job and my coworkers and the internet (MidCo) is plenty fast and affordable to fulfill our entertainment needs, so for a relatively short-term period (estimating seven years from start to finish) it's been a great way to start a career and establish myself (Paid off student loans in four years, even with buying a house and late-model car) but we still feel isolated. I miss being able to hike in the mountains, and pick up strange hobbies like rock climbing, but the new Rec center has been a blessing. In summary, Williston has been a great experience, but we can't justify staying here permanently with our families so hard to reach. If there were a cheap flight to Denver, there's a good chance we'd stay longer, as I've done well at my company and they are large enough to work me up the chain as the years go by. Right now, however, I'm beginning to push for a transfer to Colorado and hope to have it by the end of the year, or next summer. So long and thanks for all the fish, I suppose.

I would rent if there was affordable housing

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Williston is in need of a real mall and also Allegiant airlines would be awesome! SO many people travel to Minot, Billings or Bismarck just for shopping and allegiant airlines. Williston could be making that money. Also rent prices are too high, coming down, but still too high

Love working here

Need to invest more in infrastructure in Western North Dakota, such as: Roads, pipelines, water/waste water, etc. We need to see more of the oil tax revenue as well.

You should try to get Allegiant Air to come to Williston. They have much cheaper flights but they only fly out of Minot and Bismarck. / / Williston needs a real mall, not a strip mall. There really is not a lot of places for women to get clothes or shoes or accessories.

The largest concern we have for moving to North Dakota and buying a home or renting, is cost. Associated with that is the uncertainty of my company's housing allowance along with my job location being relocated.

Rent prices need to go way down. More shopping options need to be built. Feelings: traffic like a city, but not convenient like a city. Most don't want to stay here because in order to have decent variety, you have to drive 2-6 hours.

we need men clothing stores and more shopping options besides wal-mart for house hold items and general stuff. a target or a store like that would be great. we need more then one splash pad for kids. and more entertainment stuff to do besides golf courses and fishing. cost of goods and housing needs to come down. its really pathetic making almost 100 grand a year and your still struggle with money cause of how over priced williston is for rent and food and supplies. its really embarrassing and you dont want to admit you live here.

Please Import Single Women

love the people up hear but have to have moutans and trees

Dickinson needs more outdoor recreational opportunities. Trials for biking and hiking would be great. But all in all, city is doing a good job reacting to the population growth.

I was born and raised in the Williston Basin and have strong family ties here. My answers are directly related to my relationships here (ie. I wouldn't want to move my children away from their grandparents) and I also do some farming as well. In my individual case I would prefer to stay here regardless of new services offered, so long as I can support my family here.

I have live in Western ND all my life, I also have worked in the oilfield since high school (38 yrs) Have seen 3 booms & busts. It is an occupation that can be very stressful on family, communities, & businesses. To many feast & famines, But it is the career that that I chose. All in all, it has been a great ride !!

Most of the places they are building housing I wouldn't want to live. In Utah we have the beautiful wasatch mtn range which I can wake up too every morning. It seems like the housing they are building is just in a field with small lots next to other houses. If I ever wanted to move here it would need to have a much bigger lot and a much better view and be a lot more affordable. Something Closer to the river or lake, I have been working in kill deer and there is some nice areas there. I don't mind the climate, although it does get a little colder than Utah.

As far as income above, that is just my income. If you count in my husband's income (he works on the pipeline) then our household income is over \$100,000.

Need to eliminate the property tax for the school system

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

cost of living is out of this world in north dakota

Everyone thinks just because you make good money you should be able to pay high rent not true we pay 2,300 for a 2 bedroom apartment and after paying rent we have a 100 to last till next payday

My family is back home in California, if Williston was anywhere like home I would live here longer.. / my rent just recently went from 2,000 per month for a 2 bed 1 bath to 1,850 for a 2 bed 2 bath.. I am assuming because of the drop in wages, and prices of oil.. Williston took a big hit and a lot of people were laid off. I am grateful for my job, but I also have to work a second job to be able to actually afford to live here comfortably.. By the end of the week I am exhausted and burnt out and I'm just not sure if that's something I want to do for 3 + years.. if the cost of living went down, as well as the cost of housing, even though the winter here is harsh, I would stay.. I just don't feel like we should pay to live like we are in Hollywood California in a town with hardly bearable living conditions...

Live is good here

I do love the area and the people here this has been a great place to work and raise a family. I can say the one thing we worry most about is crime, the amount compared to five years ago is stifling. We have so many new drug and prostitution rings. We need better trained law enforcement and participation from other agencies. The simple patrolling isn't the need its the investigation. I have talked to many officers and they inform me many cases just slip through the crack and go to the unsolved division. This means we have a low level of intelligence in our police force and need help from the FBI to solve these cases. I also hear favoritism plays a large role in what case is solve first. The land bears daughter got a DUI vs a shooting of an out of town person. The local guys daughter usually take the attention. I do love this area and intend to stay and raise a family, I would leave if this prostitution issue isn't wrangled in soon. That scares me more than anything else I have a 14 year old daughter. I want these sex offenders brought under tight restriction. The rest is coming the infrastructure will always follow the money.

Things have slowed down some on the roadways which makes driving feel more safe. With things slowing down, I've noticed the pricing of things still being over average which hurts people working here to support their families back at their homes. Small communities have grown which helps with travel expenses for groceries or food establishments. My only concerns are the multiple hotels and what they will do when the Boom is gone.

I have a house in West Fargo and a ranch in Milnor. I would say that it far less stressful out here in Tioga than it is in the Fargo area. The only down fall is the high housing costs. My wife and I talked about buying a home in the Tioga area, but With our land, cattle, and our family in Milnor, I will continue to commute. The company that I work for pays a portion of my rent, but my part is \$1500 a month. The high housing cost has forced me to search for other employment.

Rental costs are ridiculous in Watford City! I understand everyone wanting to make money. But this really is pure greed. I love ND just not the costs !!

Living in western ND can be challenging in many ways. Lack of amenities, recreation, entertainment, higher cost of living, etc, BUT it also offers things that can be found few other places; wide open spaces, clean air/water, pleasant people, plentiful public hunting areas, and high paying blue collar jobs!

City street lights, lack of protected left turn lights and lack of 4 way stops is bad in some busier streets. Cost of living is still a little crazy

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I am a native North Dakotan that has lived here my whole life. I would be living here whether there was oilfield work or not....did not see and box that made me feel like that was important. There are a lot of people from here that are working in the oilfield just because it is a better paying job than we had before. If the oilfield left...we would still be here and I think that is an important consideration that should be looked at.

I have lived right next door to N.D. all my life, I travel into the state on a regular basis for recreation and services. I have worked between the border of Montana and N.D. my whole life.

Roads are getting better , airports easier and the people are just great

I have lived here all my life and I do not care for all the extra people but I like what they all bring to our small town. Better eating places and shopping. A lot of good poeple came up for the boom, but it always brings in bad also.

I grew up in badlands north medora on cattle ranch, western ND eastern MT is my Home, I been chasing drilling rigs since 1984

I Love ND and Grew up here. Moved away for better weather and a better job. In the meanwhile ND has better paying jobs so I came back. Now Land and housing is too expensive to move back.

We still need more traffic enforcement in the western part of North Dakota - the roads are still far too dangerous.

Enjoy ND small town atmosphere.

I have lived in Williston my entire life. I think housing costs are outrageous. I don't like the fact that with all the new "shopping" we have coming in almost all of them still gear towards oil field. It's hard to go into a store and not see FR clothing, steel toed boots and coveralls everywhere. Where are the clothing stores for women? How about a craft store? Hobby Lobby? Why can't we have an outdoor pool again? I don't like the rise in crime. I've gotten used to the traffic. I miss the quiet

Crime is not bad here. I own my house so housing cost are not important. Cost of living are high such as groceries...

Here is an opinion that does not affect me personally, some people working out here are working half a month just to pay their rent bills due to the slow down of the bakken. Therefore it makes no sense for them to stay here when most of them are out of state and don't wana live here regardless. Maybe rent needs to be dropped or companies need to give a housing allowance to help sustain the workforce.

Less intrusion by the Corp of Engineers around Lake Sakawea. More boat ramps needed.

I greatly appreciate the opportunity that North Dakota has given me to provide for my family. The only problem I have had is that it seems hard to get noticed at work for all the hard work and effort I put into it. It seems that if your not a North Dakota native or a friend to one of the management personnel you are overlooked for advancement opportunity.but outside off work I have found the people here very friendly.

The majority of the tax revenue from the oil production should go back into the western part of the state where it was generated from and where it is definitely needed.

My biggest frustration now is my husband's commute on Hwy 85 and Hwy 22 several times a week. It's very dangerous. Also, I don't appreciate Dickinson's pot hole streets when we pay the largest property taxes I've ever paid. Otherwise, our lifestyle is a good one I think.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Really a lack in walking trails and other free public use spots

I moved back to ND 10 years ago, before this boom started. I did not work in this industry then. I am not sure I would have been able to afford to move back if we had waited another 5 years. Since we bought our home before the boom our mortgage is still affordable. Our home values for more than twice what we bought it for now. I guess we got lucky.

I grew up in ND and have worked in the oilfield most of my adult life. I currently work for a company based out of ND but my office is in Denver. North Dakota is a great place to work and raise a family.

Rent needs to be lower in Williston its more than any where else in the country its crazy.

traffic really sucks, worse because of construction...so will hopefully get better. Daycare options are despicable! way to high cost, one parent almost can't afford to work because daycare costs more than they can make at their job! cost of goods is outrageous too. small businesses such as lumber yards rip you off 2 and 3 times the price of a Menards or other store. the filth in the ditches is getting old too. there's garbage cans at the gas stations, throw your trash in there!

Traffic on 22 and 85 is ridiculous and I believe the state should do more to try to eliminate all the accidents that are on those highways which will help eliminate the fatalities that are occurring.

I'm 56 years old I moved to ND in 1982, Been living in Williston Since 1994 raised three kids here. I plan on staying here when I retire but will spend winters in a warmer climate.

I understand an economy's influence on inflation, within the local market. But the current housing conditions are still appalling. Price, combined with quality of construction (or lack, thereof) have been significantly influential in my hesitation to make ND my permanent home. Booming oil economy, slow oil economy; there is no excuse for the current prices of single family homes, apartments and trailers, within the Bakken community. "Extortion" is the first word that comes to mind.

Need more affordable housing.

The greatest issue in this community is lack of affordable housing and the high cost of daycare, food, gas etc. Everything is so over priced that even if you make a good wage you spend it all on rent and food.

The BLM, Forrest Service and/or the state needs to provide additional OHV (Off Highway Vehicle) area's to give those of us who enjoy off road activities. I have enjoyed OHV area's in different area's of this great country of ours and North Dakota is by far much more restrictive in regard to OHV access than any where else I have lived. My family and I are forced to go to Montana or South Dakota to enjoy significant OHV area's. Some of the area's, e.g. Kimball Bottoms, are so small they are dangerous. There is a lot of open land in North Dakota, let the local OHV enthusiast stay home and enjoy our hobby!

The question about either living in a small town close to work or larger city and drive farther is a terrible question and you cant even skip it.

Work rotating shifts 5-4 12hrs. If the price of housing doesn't began to come down may have to stay renting the unit we are in now, would rather own since I plan on staying till retirement.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I have lived in Minot now for a little over 5 years. This town is a tax town. All the council want to do is raise taxes. This town gets extra revenue that no other town in North Dakota gets. State fair money, horsefest money and Air Force base money. I pay over 4k in property taxes too. Where the hell is the money going. Nobody that lived and grew up here knows. Seem like a very corrupt city. Thinking about dropping it all and moving back to Walhalla nd. For what I pay here I could just as well move back.

I am from North Dakota. I have lived here my whole life and do not intend on leaving. I was never going to work in the oil field, but when I got the opportunity to see the income potential I had to give it a try. I thought the conditions were going to be a lot worse than they are. I have met several great people from out of state, and that the dangers out here are mainly caused by personal actions. The oil company I work for, stresses us everyday to use safety first and to never endanger anyone even if it will cost the company several thousand dollars. People that get hurt are because of their own actions, or their co-workers actions. Every employee out here has the right to stop the job. People need to be less hesitant to use that authority.

I'm a born and raised North Dakotan and love living in our great state. I've worked in the oilfield for nearly 20 years. My largest concern for our state is our highway infrastructure, we are way behind in this area with the increased traffic, our infrastructure can not handle nor was it ever designed to handle the amount of traffic we see on a daily basis. Road rage is soaring in North Dakota due to the ever congested roads, impatient drivers are driving up our fatalities due to collisions from road raging drivers and the slower moving traffic. Housing is also a major concern for our youth fresh out of college and starting their married lives as a family. The housing greed in my area is a very serious issue, we are driving our youth from our area due to the excessive pricing of our housing. Thank you for your time.

I would prefer to live in a smaller community even farther away from work as I like the peace and room to breath. Also the smaller communities are typically cheaper to live in including the outrageous cost of property taxes in a city that doesn't provide much for the cost of the taxes.

The community that I live in needs to focus on more food and entertainment. Affordable housing means the prices are lower and really affordable. We need homes and not apartments. We need to get rid of the man camps. they look terrible out along the main highways.

I have lived and worked in North Dakota for 27 years. Bought our house about the time the market bottomed out after an earlier boom; which is why my cost of living/housing responses indicated they were of relatively low importance.

Very happy to have a job with Whiting Oil and Gas!

a boarding facility for horses. a indoor shooting range.

There seems to be a culture of drug and alcohol in this town. I believe it to be habit because there isn't much else to do. I do know for a fact that the ARC (area recreation center) has helped amazingly with this issue. Maintaining that's building is huge. I already see some signs of wear. That building is bringing in big dollars but then back into that building period. and we all know its not good practice to take road money to build schools or to help the study of grass land whistle pigs excetra. I hope I'm getting my point across here. we just need more things to do to keep these kids and adults from doing things that they are accustomed to doing like drinking or getting high. I don't know what kind of things these would be I just use the arc as a good example maybe there is some more of these kind of activities that someone would be able to think of.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I'm very happy with my Job here, but I do want a place of my own, I've never had roommates and I really like my privacy. I have a home full of belongings in Mt., but I would be willing to store them and invest in a 5th wheel to park out of town and to have a place to keep my dog. I would also be happy with an old farm house If there were something affordable, even if it needed some fixing up. / Contrary to many other workers here only to make money and stay somewhat short term, I would very much like to be part of the community. I've met some great locals and know I could feel at home in the right living situation. I really appreciate your biking and walking trails and have used them when I can. / I'm also saddened with the lack of respect that so many people have for keeping your community clean. One thing I would Like to see is a full recycling facility, I take all recyclables for my townhouse back to Msla. with me on my week off. / Thank You for letting me give my input.

I don't believe homeowners should have to pay property taxes. In essence we're just renting from government and never can own our homes free and clear. The tax man can take your home from you for not paying your property taxes. And people especially the older ones in our community, who are on fixed incomes may not be able to afford the increase in taxes which is inevitable now that the gov sees it as a viable source of revenue.

The last question on second to last page. / Which would you prefer / / Neither option applies to me / I'm happy right here in Williston

Nothing against ND here. My wife found a job she really liked in Houston that pays more than I am currently making. She's more important to me than work so I'm going there. She, however, does not relish the idea of North Dakota mostly due to my work hours and thinking she'd get something similar. She believes we wouldn't get enough time together even if we both lived here and it would be hard to raise a family working 16 hour days.

I think we all deserve more money for the dangerous job we do plus having to do all these stupid surveys and test because none of us can actually afford to live here on these terrible paychecks

I don't see how any one can get ahead with the cost of living it's outrageous my wife's about to move back home and I'll live in employee housing so we can save money

5 years ago when I started working here it was like the wild west and my wife coulnt believe the crime that didn't get reported. Since then the force has become more proactive rather than reactive due to more police. My wife is not convinced. I have a 6 year old daughter and would be stressing everyday of her abduction by a greasy water hauler. My wife is also a California girl and we live in a beautiful part of the country so visiting the snow is nice and living in it would be a disaster. ex. driving. In the 80's Williston went through the same boom its going through now and to look at all of the expansion that is happened in the last 5 years is extraordinary. I can only see the boom puttering out and the local taxpayers being left with the burden once again due to big oil moving out. This field is over half way developed. It cant last.

With renting a 2 bedroom 2 bath apartment in a 3+ story 700 room building costing over half of what i make in a month even with an employer allowance, living in the williston area is not cheap. food here costs 2x as much as back home too. with a child that is starting school in a year and the lack of social infrastrucure moving to the area right now is outside of my means both finacially and emotionally. i have great hopes for williston specifically in the next 5 years and i hope that city and county planing put in good effort to grow this once small town into one of the most effective and efficiant cities in the greater north west.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I wouldn't mind living in ND but I haven't been here long enough to make a decision. The job market has changed so much since I started that I don't know what is going to happen. I would also rather live in a small community and be closer to work.

While I like working in the oil field, I would never consider moving to Williston ND, or even ND at all. NOT saying that the state is a bad place at all, I just have no interest in living here. I already have a home in Eastern Washington, I plan on moving around the country and eventually the world with my current employer, I like having a rotational type schedule where I can get away from the work environment. The only thing that would make my job better would be more work, more hours and more pay.

The cost of living being the highest in all of North America is absurd. The influx of investors who have taken advantage of the transient workforce, as well as the local residents, should be ashamed of their gluttonous greed. An apartment in downtown Manhattan costs less than it does out here in Williston. That is neither sustainable nor acceptable.

I really like North Dakota most of the year, but the winters are just too brutal to want to live here in this kind of housing environment. Also, I have three daughters, and no desire to raise them in the oil patch.

If their could be a gun range closer to Dickinson and if it were out to 1000yrds would be great! And if the cost of living be a little cheaper the people would stay around if the boom dies out.

Williston has seen some dramatic changes and been faced with some very challenging issues over the past 20 years. I am proud to say I am from Williston. I have raised three kids here, all of which moved back, all with great jobs and families. The city leadership has and must stay strong for the next 10 years will be critical for its future in many ways. I came here back in the late 70's when the last oil activity was occurring. It has been a great place to raise a family and we need to continue to pursue this place for the next generation.

There needs to be more things for the kids to do. Safer things. Williston is really dirty, trash, dust, mud everywhere. It needs to be cleaned up and grass planted and taken care of. ZONING is a HGE issue. There are industrial companies next to housing. Nice houses right across the street from mass apartments. Needs more neighborhoods that are family oriented and at a decent price. Schools needs to listen to the parents, needs better education. The hospital in Williston is a joke. We need real doctors. Seems as though we have the bottom of the barrel. I fear getting sick here. Would also be nice if we had a square location downtown or something where the community could come together once in a while for live music with their families.

I have lived in NW ND all my life The Oil Boom of the last 7 or 8 years Was too much too fast Things need to level off and slow down I have worked for a Major Oil Energy Service Co. for 14 years I have seen the change. My rent has over tripled. I Will Not Buy Over Priced House or Condo that will be worth half when this is over. Traffic is very dangerous Crime is up and a lot of Disrespectful people have invaded the area. I'm tiered of it !!!

I have lived in ND all my life and enjoy it

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I believe there are a few things to which North Dakota and particularly the Bakken area are turning a blind eye. With the current slowdown we are operating less than half the rigs we were a year ago. OPEC has bolstered it's oil production, thereby pushing oil prices down so that exploration here is at the break-even point. In doing this, although selling their commodity at a lower price, they are holding onto a greater share of the market. In addition, if the US and the European Union reach a deal with Iran and lift trade embargos, Iran will flood the market with oil it has had to sit on for years, thus pushing prices even lower . Until six months ago, everyone behaved as if playtime in the Bakken would go on indefinitely. It is entirely conceivable today to see drilling here cease until prices increase dramatically. If that were to happen here, with North Dakota's two main industries being agriculture and oil, what would all of these oil field workers do? Some estimates put the transient oil worker population between 40 to 50k. There is not enough work in North Dakota's economy to absorb these employees without the oil industry. The services and housing question assumes there is a population available to support it. For the moment there is, but everyday the rig count drops, that population's existence here becomes more tenuous.

the cost of housing is completely out of line, its the highest in the country and there is nothing here !!

To much wind and no trees

Lower house prices in the Williston area would allow me to buy a home.

The reason my housing is so positive is that I am in a new Company owned house with very reasonable rent for the area.

The mancamp/ paid company housing is an essential reason for me being here. With that gone, so am I!

North Dakota is a nice place. We should start a tree planting or tree give-away to enhance the area. Keep enhancing your parks and your downtown area and don't lose your small-town feel !!

i have a son with an x that makes it impossable for me to move here. Other than that love the job.

Lack of rain, water, trees and the cold winters are big factors. If I was going to move from current place, I would prefer that environment

i have lived in Williston since the 3rd grade, I am 31 now and have seen this town change drastically. Not for the worst though, granted this town has had some issues with crime and the rotating workers that have come through. but it is getting better. The one thing that has not changed in my opinion is the affordability of living. Everything in town has its price so hiked up that we have resorted to ordering everything shy of food online. We currently rent but would love nothing more than to buy a house, however with the price of real-estate, even with the turndown in the market it is far to much of a risk to invest in long term commitment in this city.

Housing isn't to much of an issue after the slowdown for my income range.

What I'm hearing from people my age that don't have ties to ND other than for work is that the Williston Basin needs more things for people to do. It needs to be developed to attract different entertainment and shopping options that would encourage families to come in

Thanks for asking for input from the working man or woman. Hopefully this survey will create some changes for the better in the future.

more retail store, cinema theater and affordable housing will be available for renting or buy

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I enjoy ND, having come from Wyoming (open spaces, small communities). Living in a "boomtown" like Williston has been challenging, mostly for access to good and reasonably-priced housing. Since I graduated in '10 with Petro.Eng when the market was terrible, I was really happy to have a job and my then-fiancé was kind enough to move with me to Williston, which has made life very enjoyable. I wish there were more access to public lands (BLM-style), or more terrain (mountainous for hiking, etc). We go to Minot if we're looking for more shopping but haven't made it to Bismarck either, so it's not a priority. My wife was able to find a good accounting/AR/AP job with a local electrical contractor, even though she "only" had an International Studies (minor in Religious Studies), which would not have happened in almost any other environment. I've met a lot of people getting second chances in ND boom, and a few are putting down roots. The town seems to be (slowly) investing in infrastructure to handle the flux in population and services, so the tongue-in-cheek "It's getting better together" motto for Williston is actually holding true. My wife has a lot of family in N.Colorado, S.Wyoming so she will want to move back there in the next year or two if possible, and I'd prefer to stay with my company if possible.

I like my the people I work with. But would prefer to find a job closer to home and my family. It is nice out here , but born and raised in MN. That is hard to get away from.

My wife and I followed our grown children here in 2010.We looked(and still do) at it as an adventure.We have a home in northern Minnesota which is paid for.We have found ourselves going back to Minnesota less and less because our kids are here but aging parents are there.Our kids have embraced this town but I consider Minnesota my home

The 2 Badest dudes to walk this land not once but twice Lewis and Clark. Granted there are no trees but there's nothing for family life ,movies ,Bowling, etc. .Williston is on a main Hwy to the west build it and they stop to take in the town and then they spend money no different anywhere else. We as Americans don't build, produce or manufacture. You own and make a business here your making bank I just have ides not just here but back home as well just no capital and backers .It's how good are you at Sim City. Drive Ins way of the past shame.

Housing: I would like 200-400 SF studio apartment at a reasonable cost.

I would like to rent a place here but it is way to expensive

The fact that my job could go away and I could get laid off is another factor in me moving here to ND permanantly as well.

I do not like North Dakota but I tolerate it to make money.

I live in surrey, north Dakota love my job and have no intention to leave at any time. love north Dakota and look forward to new adventures

housing has become ridiculous in price more expensive than living in New York city. / I like that the shopping has grown a big plus, the ARC is ridiculous in price for a larger family for an annual pass, if it was considerably lower maybe then I might actually go to it. Both theaters here are kinda gross to go to. The parks are great

While there are benefits to living in Dickinson, it seems like this town is stuck in the 1970's when it comes to dealing with problems or addressing concerns.

My wife and I love the area and sense of community

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I raised three children in ND, Williston. It is not the same as it was, but nothing stays the same. / I have lived and worked in the oil patch for 34 yrs. From Texas to Alaska. I knew one day I wanted to return to ND to finish my career.

We need more entertainment.

I want to buy a house in Williston ND. / But not willing to pay the higher prices (I know this won't last forever and the houses value will decrease) / I originally had bought a house in Fairview MT (1 hr way from Williston) for 40K (1 1/2 lot, 2 bedrooms, 1 bathroom). I am not willing to get into a 150,000.00 mortgage at this point.

Rental housing is ridiculous, not enough affordable family houses. To many townhomes apartments. The houses that are available are so called "Luxury" houses. Where are the 3bedroom 2.5 bath 2000 sq. ft. homes for around \$150,000 to \$200,000. Or the same houses for rent around \$1000 to \$1500. / Cant believe these investment groups and property owners get away with the outrageous rental prices. in the summer of 2014 A 2500 Sq. Ft. house selling for \$305,000 pending on interest rate would be most likely less than \$2000 a month mortgage payment. But that same house rents out for \$4500 a month. Not sure why they are ALLOWED to get away with this. Thank you for your time!!

I work 10 days on/4 off, but I'm on call 24/7/365. I think this is the part of the oilfield that most people truly don't understand, until they're thrown to wolves and have to take the calls and call the shots when their phone rings at 2 AM and there are problems to deal with. This is the part of the job that pushes people away, regardless of pay. I've seen a bust cycle (1999-2000), and it wasn't pretty. People that haven't lived and worked around the oilfield, and have just come to Williston recently, don't understand the ebb and flow of the work. The market goes up, the market goes down. Jobs are here, then they're lost. The oilfield takes no prisoners, and things happen fast. / I'm born and raised in Williston, and the last 1-2 years have been miles ahead of where we were for the 6-7 years before that. I can go to a restaurant now and sit down right away, have decent service, and not take 2 hours to get my food. I get sick when I drive down the roads and see all the trash in the ditches, and disrespect people have for my hometown. The single best thing I feel could be done, is if by some miracle we could bring housing costs down, and get people to move their families out here. There seems to have been a lot more of this in the past couple 1-2 years, and it shows. Parks are full of kids playing, people seem to take more of an interest in the town, and the positive attitudes are contagious. Personally I don't need brand new rec centers and movie theatres to keep me in Williston, but that sort of thing does help to get good families out here, and Williston needs more of that. You'll always have riffraff where there is money to be made, but I've seen a lot more good people come in to this town than bad.

I won't 2 move closer 2 Williston,nd.and I'm doing slot of foot work 2 achieve that goal I love my job.

I have a child on the way that is in the need of a high risk pregnancy hospital. The closest one is a six hr drive away. Also, the health care system here, in my opinion, is the worst I have ever seen. For long term residency, health care is huge. I have lived in California, Tennessee, Colorado, Montana, and here. Every state, but North Dakota, has had very well kept public parks throughout the city. The parks here are not kept up and are filthy. All this all being said, the city has cleaned up its act tremendously over the last three years. Williston still has a long way to go and I'm curious to see what happens. I plan on being here for at least 3 more years, unless I lose my job.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

wish rentals were cheaper.

I think employees are sympathetic and understanding of North Dakota wanting to localize the workforce for many reasons that make sense for North Dakota and its cities and towns. However this does not make sense for many of the workers out here and their situations. We are good hard working people and the tolerance of mancamps provides for our families and many others as well. Thank you for reading this.

I have worked with the same company for 38 years and hope to retire in the next 3-5 years. I have lived in Williston since 1989 and raised/schooled my 2 children here. I struggle with trying to decide if I will retire here or move to a more affordable location that has more to offer the older generation.

My dream it's always been ,to bring my family to live in Williston and send my daughter to college here.and buy us a house.

With the cost of housing so high as a single mother I would like to see stores like the Dollar Store or Ross. Some place I can afford to shop at. And a shoe store for something other than work boots.

I was born and raised in Williston ND. I feel for all of the people coming in to Williston who are not use to what we have to offer however you have to make the best of it as I see no matter where you are at you would complain about something. The thing that upsets me is when people complain about it here this is my home and I have worked in the oil industry for over 13 years. I was born and raised in this industry. I hate to see all of the trash and the mess that people make of our home town. Disrespect the town as there are people who want to be here and you can complain until you are blue in the face but you have to make the best of it. People are making good money yes but I do agree that rent is high but at the end of the day it is out of our control- you can complain about it but at the end of the day when all this is over people will still be here and the ones complaining will leave there mess behind. We need more patrol men/cops so drivers slow down everyone is in a rush. You only hear the bad things on the news and in the paper. Sad to say but you choose where you want to be I get the money is good but no place do you see the cost is more expensive here. The kids I feel bad for living in campers and with many people in places but at the end of the day do you think families will live there own home maybe if rent went back to \$250.00 for a 2 bedroom apartment it comes down to this town is all money hungry and it is to late to fix now.

I have lived in ND since 1975. Williston 1975-1986. Bismarck 1987-2015. Could have moved a number of times to "chase the oilfield" but chose to live here for my family and pack my bag for work. Chose to live here and continue to choose so. Have been in the oilfield for 33 years

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Moving to the Bakken is the best thing my family has ever done. Work is abundant, regardless of your age, skill or knowledge level. The people who live here (rather they are "locals" or "transplants") are wonderful. Being here is really an opportunity to live the 'American Dream' because it is alive and well here, even with the current downturn in the O&G market. / / My only complaint is that there is no public school transportation available in our school district. That wouldn't be too bad for me and many others I know if the schools had clearly marked cross-walks and crossing guards because our children could walk to and from school, however those are not available. I asked our school about that becoming a possibility and was told that it would not happen, but that instead a cross walk and flashing lights were going to be installed. I do not believe that is an acceptable solution. I would like to see if our school could band together a group of parents who are able to volunteer for this on a rotating schedule without being penalized for arriving at work late for a week for this purpose. / / Overall, I believe the city of Williston and Williams County has done a great job attracting and allowing new businesses to build and grow. In time, I believe Williston will have all the same amenities that the bigger cities are able to offer.

I work full time for icon agency and school fulltime. I do not have any benefits from working. if I don't work, I don't get paid. I am unable to find a direct job due to the market conditions. I pay my tuition out of pocket and my books my Pell grant covers half and I do the rest. I got a two bedroom apartment for 1200\$ and earn \$18 per hour 40 hours a week. I could barely even live life because my rent is pretty high. and no work benefit for a backup. /

Moving our children to North Dakota from Houston, TX was a culture shock but the children have adapted and learned to love Williston for its small town charm. The opportunities for our High School freshman to engage in extra curricular activities was disappointing. She had been part of the color guard team and went to competitions which she enjoyed very much. Our 4th grader has to be bused daily to Round Prairie Elem 16+miles away! That is tough to do in -20 degrees weather!!! / Additionally the flights to go back home and see family were beyond RIDICULOUS!!! A bigger airport with more competition is definitely required! The high costs of flights is what is making me return to Texas since my children need to fly back every other month to see their dad in Houston. The high costs of flights broke the bank so to speak! I have thoroughly enjoyed Williston but the high costs of travel and food and lack of quality regarding education, housing, and food has all influenced me to head back to Texas. Thanks for taking the time to listen!

The cost of living from one city to another is ridiculous. I am paying almost 800 more a month in dickinson for the same type of place as I had in minot for 1000 a month. Bismarck has then same type for around 800. Williston from what I have heard is upwards of 2000. Had to go where work was but with the slow down affording even this rent with my other bills is getting close to impossible. Not sure how much longer I will be able to stay. Basically working just so I can work at this point.

Import some single women please.

how many public officials got rich from this oil boom i been here in the 80s

I have no further comments

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Moving to North Dakota has been the best decision that I have made in my entire life. It is the last chance so many of us have to pursue the "American Dream". Just by moving here I have tripled my salary and will actually be able to support myself, start a family, and live the way that I should. Basically it is the last place where one can come, work hard, and make enough to thrive.

It is a shame that the area seems to take advantage of the oil field boom by increasing the prices for every commodity known to man by at least 50%, as opposed to other places in the USA. I thought when I moved here it would be a simple thing to buy a house I wanted, and get my family moved pretty quick, however the pricing and housing available is indeed sparse pickings. I do not reside as I wish in ND, my choice to be in an Apt was not an option I has wished to occupy. As soon as people find out your in the oil field they just want to screw you over finacially, for some reason people around this area think anyone working in the oil industry is wealthy and locals are all to happy to exploit that. Compound that with the drop in oil pricing, there is less work, and less financial gain for those working in the industry. Pricing in the local areas hasnt really come down to equate. The locals still want premium \$\$ for very little product.

As I get older I find that the time with family and loved ones grows more important to me.

as long as my emploieer will keep flying me home I will do that. I dont have a vehicle here so I dont know what is out in the community

Growth of the community would make for a nicer environment, especially with non-oil industry people. From what I have seen in the past 4 years, I would never want to start a family in Williston. Too few things to do, too expensive, too many sketchy things happening.

Infrastructure in ND is inadequate such as highways and visibility at night(poorly lighted)

The community needs more law enforcement

Williston is getting better. We need some Indian Food. / / / And some decent/real Mexican or Tex-Mex. Or good chips at grocery stores. I can deal with either option.

I am appauled that you would ask my gender. I identify as a trigendered omnisexual unicorn. You can not force me to identify as a "cis" gendered pig.

If the prices of houses go down and the property taxes it wouldn't be bad. Not everyone can afford 250k+ house.

Williston has come a long way in the 4 years my family has been here. We can all see it getting better.

I called a clinic they said they weren't accepting new patiance. I went to a doctor and it was 2 weeks before he was in. I wouldn't feel comfortable raising a family with those conditions

Are you crazy

work to much to enjoy muchof the state other than the sites I see travelling to and from well sites.

The new roads and stores are appreciated

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I would like to see the construction of more single family housing. I want to purchase a home, but the property market is tight right now. All of the major development in central and western North Dakota seems to be geared towards providing either disposable mobile or manufactured homes to set on a rural lot or for large high priced multi unit properties designed to maximize rental income. I want to see more three, four, and five bedroom home developments in these regions. People that want homes like that are people with families. Families support communities and communities make our state.

I live 40 miles one way from my job so would love to live closer, but that's probably not going to happen. We have no children at home which figured in my reponses to what was important. It was to me personally ... today. Quality education and child care are very important ... just not so much to me. I'm looking forward to Williston expanding to the north finally.

I would like to stay and develop a home in Williston, but do the volitility of the housing market and the prices I do not intend to stay.

The hardest thing about Williston is finding something other than an apartment to rent. I'm living here not knowing exactly when they will transfer me and a small house would be nice. As nice as the apartments are here in ND, a space of your own is what you need in a place with limited things to do for entertainment (not including outdoor recreation)

The streets around the city need repairing; some streets have been patch 3 times and still the need work. Need way more stop signs in the whole city. All the companies that are building need to be held accountable for leaving garbage fly around the city. There is way to much trash all over the place people and company?s need to be fined if they don?t clean up their trash. The last city we lived in if you didn?t clean up you area you would be fined \$500.00 for each time. Company?s where fined \$5000.00 to \$10,000.00. All you have to do is drive down 26 street and see the trash all over the place which ends up in other yards.

The williston area needs better healthcare services. There is no walk-in clinic for me to bring my children to when they get sick. I had to wait 3-4 days to see a doctor. My only option is the Emergency Room which is far more expensive and not intended for common illnesses

My time in Noth Dakota is limited due to being on a visa, I can only stay another 2.5 years in the US. This influences my answers. Harsh winters would put me off settling long term in the state.

Spouse is primary care giver to older family member. Not convenient to move immediate family and take spouse away from primary crae giver duties

Thank you.

Our biggest concern for our living situation is the water supply, the quality and supply of food items especially fresh produce and fish...the quality of fresh produce here is not good. Also, there is no shopping outside of Walmart, and no entertainment for families. I would love to see more art studios, or galleries, and more art supply stores close by. Better food, better shopping, better water....those are the areas that impact our lives most.

If it were just myself I would live here but 12 years ago my wife and I moved to her hometown to be closer to her family so I could not ask her to move, also it gets to cold for her here. LOL

The boom is gone and home prices havent reflected it yet. My company is no longer providing a moving package. So at this point after working with the company for 14 years I am searching for another job to be with my family.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Cost of living needs to go down.

i really like nd but m almost ready to retire and i have a home and all my family in nm

I have lived in Williston my entire life. I was born and raised here and would like to see some changes. I would prefer if people could move on and I could have my home back. I cannot stand it if people talk badly about Williston or North Dakota in general. If you dont like it here then leave. I have worked with the same company for 10 years and have no intentions of leaving. I would love to see the town grow with some thought behind it and not just build stuff in where it can fit. I want my home town back and I want my children to appreciate what they could have here as well.

Housing is really expensive. If my company didn't provide housing, I wouldn't be able to afford it, and would have to leave.

A lot of landlords have separate, higher rates for people who work in the oil field. Charging someone more money for rent just because they work in the oil industry should be illegal. Also, the cost of food and other goods is outrageous. Living in one of the biggest farming states in the country, you shouldn't be paying \$6 for a gallon of milk or \$6/pound for ground beef. The amount of greed in this state is absolutely disgusting.

Better school system (less politics)

When up to 85% of Williston's rental properties are owned by one company, Greystar. There is no competition. Therefore no lowering of rents. While rents stay high, house values will remain inflated. If your goal is to have more families move into Williston, they need affordable homes, not apartments. The city council and mayor in Williston need to drop the greed and catch a clue.

Hello, / I think this survey touched on all the key points. I would like to stress that an improved traffic situation is pretty important. Just as an example; along highway 2 in Williston, traffic is almost guaranteed to be stopped at every single signal. This puts a significant drag on time to travel to the office, as well as reduces fuel economy by a few miles/gallon. / Overall, I'm very happy with the strides the community has taken over the past few years, and hope to see it continue. / Thanks,

I have lived in North Dakota all my life and feel that the amount of money that is being brought in from the oil fields of the west part of the state is not being put back in those communities. So many of the roads and infostructures of the West part of the state are taking the abuse of the fast growing oil field and the communities are suffering for it. We need to re evaluate where we are spending the money to better take care of those residents. It's not a matter of if, but a matter of when the oil field permanently slows down that we will have a compounded mess that will need to be addressed. At that time will it be too late? That will be the biggest concern

I find these questions highly personal and intrusive.

this state needs to take a active part to regulate the labor of these company's and how they take atvantage of their employees in the DOT hours, Housing. Man Camps are not up to safety regulation as per other States and they, as they can work around on duty hours so that the employee's are working without pay and not logging those hours.

North Dakota is a great state full of great people, the only issue I have is the fact that the gouging going on is out of control. This is the only reason I would never consider living in North Dakota.

Great place to be. Just wish landlords weren't so greedy

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

The cost of living in the Minot area has risen substantially. Taxes, utilities, groceries, etc. have risen dramatically. It seems there is no end to the additional taxes the city keeps wanting for infrastructure, building new jails, parking ramps etc. because of the increase in population. The flood of 2011 left many of us who were flooded financially strapped and then to have the cost of living rise so much, it seems that you can never really catch up.

Thanks for this opportunity to contribute. Left the Alaska oilfield after 11 years to work here in ND, closer to my life-long home in SD. It's a wonderful opportunity in a beautiful place.

I am satisfied with my housing NOW. We just bought a house in early 2014. However, from 2007 to 2014 we lived in an RV because first we could not find suitable housing and then housing became too expensive after the boom/flood.

The biggest concerns within our communities are how poor our roads and infrastructure is, and the need for more law enforcement. With the high property taxes we pay, there is no good reason we lack in that area.

Road conditions and traffic congestion in the oil impacted areas need serious improvement.

I have lived in the Williston area for almost 15 years and I feel after the dust settles it will be a great place to live and work. Our only concern at this time is the cost of housing for our young adult children. It is way too expensive for them to be able to move out and there is really no reason for it to be so expensive.

I grew up in this area have worked 40 years in this oil field. I have seen every oil Boom and bust since I was a child in the 50s, I wish some people were not so greedy during this Boom cycle because it always comes back to bite them.

I have a two year old son. Child care is a major issue. We were on a waitlist for 8 months for a mediocre day care. The two best day cares have wait lists greater than 2 years long.

Thanks N.D.

My husband built our home 7 miles north of Minot; for this reason I am satisfied regarding the cost. My main concern is that Minot's cost of living is the same (if not higher) than Minneapolis MN and other big cities- yet we do not get paid scale compared to the rest of the US.

The ENTIRE state needs to realize what this area is going thru. Live here for a while. Making a brief visit does not really give you the flavor of what is happening in this area. / Locals are getting run over by many newcomers thinking they can break the rules and ask for forgiveness if and when caught. / Yes the eastern part of the state (where I'm from) has traffic but not the same type of vehicles are on the road. / Hopefully the state does not consider pulling any funding due to the recent fall in oil prices. This area needs many upgrades due to being neglected in the past. / For traffic at major highway intersections overpasses need to be installed instead of more traffic lights.

Turning Lanes on highways

Living under North Dakota economics is very challenging. The reason I state this, many states do not have state income tax. Furthermore, North Dakota does not offer income tax free for Military Veterans. Food and housing cost are similar to California. Extreme supply and demand is being played out here and residence are the one that has to carry that financial burden.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015 ¹
The cost of housing and the cost of goods, services and fuel are high. Also in Tioga there is no place like McDonalds for a quick meal, Walmarts are in either Williston or Minot causing you to drive for 1 to 1 1/2 hours if you need anything. Afterw working 12 hours a person doesn't want to drive that far, shop and then return.
we moved here from san diego, ca 4 years ago. we wanted out of ca due to no good jobs and high crime and drugs. cming to nd we believe was the best life decision we've ever made. we love it here
#NAME?
City services are important - efficient trash pickup, snow plowing, and general city cleanliness effect quality of life significantly.
The local people that do not have oil/wells/etc. are paying the price of the high living economy.
The cost of housing is terribly high even though our son works fulltime and makes fairly good pay they would not be able to afford a decent rental in the area. / / The cost for basic daily household items is much higher then any other area, we used to spend the time once a month to run to Bismarck for our shopping, even with the cost of fuel/time it was less expensive to do this then to shop locally, we have stopped because I have started ordering most of those supplies online to save in cost that way. / / The post office is a joke, I cannot have a mailbox outside my home (we purchased a newly built house in town) because it would be a new mail route, my neighbors across the stree have mailboxes. They have sent back perscriptions because we did not get to the mailbox in time. They are only open for an hour on Saturday and if you should have to pick up a package the line is normally quite long. / / Of the items I have listed for myself the ability to recieve mail to my door would make the cost of local shopping minor. For new people to the area the cost of living in Watford City causes many of our new employees to choose to commute from Minot on a daily basis.
Most of the reasons that brought me and my family to ND many years ago are vanishing with all the "prosperity". I will probably not remain in ND after I retire as it is becoming everything that I sought to escape from -- crime, high prices, traffic and trash. It is a shameful example of a State government bought and paid for by big business. When the boom ends-- and it will, you will be left with an even more desperate region as many of us 'locals' will have moved on. But, keep building apartments, mancamps and RV parks for people that have never had any intention on living in ND and, for businesses that bring their own temporary (transient) workers rather than emphasizing employing locals.
The cold is only one part of the major difficulty in relocating a family to North Dakota. The lack of activities during the winter months are a major drawback. Without traveling to Bismarck, Grand Forks or Fargo there are very few indoor activities for children from November through March. These lack of resources would typically not bother rotators or single people but are a severe drawback to moving a family up here.
I hope this survey leads to housing improvements in the Keene area.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I moved my family from Texas to ND for work. It was "impossible" to find affordable housing large enough for a family of 6 (4 kids). This was one of the reasons I moved my family back to Texas and I'm now commuting to ND. / / Other reasons for moving back is there is little to no competitive sports (other than hockey) for children to be involved and stay active. If you grow up on skates that is fine but if you have never put on a pair of skates until you are 14.....it isn't much fun to be a kid in the winter.....Family didn't mind the cold weather, we could have managed the housing but lack of activities for my children was the main reason for moving back to Texas and commuting.

Quality of life needs improvement. Very limited recreational/concert activities, restaurants are very limited in healthy food selections (way too much fast food restaurants), grocery/deli selections are all the same, newspaper is a poor quality publication. State needs to recognize alternate work schedules (9/80).

Minot does not have good recreational facilities. There is no city-operated indoor pool or rec center. MAYSA arena's schedule is always full and they are always pushing for donations from already cash-strapped parents. / / Minot's planning and traffic are terrible. signals are out of sync, intersections are poorly planned and have either no or too short of turn lanes. There are blind spots and dangerous intersections everywhere. Traffic violators are rampant - running red lights and excessive speeding. Police seem indifferent to traffic violations (in fact they are some of the worst drivers here). / / PS - the auditors in minot are rogue. Taxable values continue to rise despite flattening or dropping house values based on sales. Even with a recent appraisal there's no fighting them.

My main concern is the rampant price gouging that is going on here. We want people to come and live in ND make it their home and bring their families, put down roots. With these prices only those who are willing to live in the man camps are arriving with no families causing a transient state with no sense of morality or decency. Their idea and sense of North Dakota's is were a bunch of money grubbing heartless people and they do not need to be respectful of anyone like that.

I find the weather too extreme. Three - Four months of warm weather is not enough. Prices on everything is 2-3 times higher than what I pay at home and the quality of what I purchase is below standards for Texas. In Texas if you price gouge...you get prosecuted, here it just seems the way of life.

I am not a typical oil field worker for my area because I was born and raised here. But many people that I work with that have migrated here due to the boom drive more than 100 miles a day to and from work, or pay outrageous rent.

Divide county has an extremely biased and unfair family services/law enforcement system. I had to leave the county during my divorce over their biased behavior. / / I will be leaving the state soon precisely because of the incompetence and unfairness in Divide county, and the obscene cost of living here.

It is very difficult for me to get my significant other to visit me! She does not drink alcohol or watch TV. Rather, she is very active and hikes, likes to use bike trails, and ride horses. She visited me once during the Alaska State Fair last year and walked all over town numerous times. Miles and miles. Consequently she knows this area better than 99 % of the folks I work with. There are plenty of horses, however, no places to rent them. The bike trail system needs serious expansion as well as parks and tourism in the Minot area. The library is a joke. HOPE THIS HELPS!

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

There is an unfair disparity across the Williston Basin cities on the price of housing and the price of groceries in particular. Other costs seem pretty even across the Basin.

I really enjoy North Dakota. I think it is a great place to gain experience and knowledge, but I am from Texas and that will always been my home. I plan to go back as soon as my assignment is over.

Minot has taken advantage of situations to charge more in housing. First with the Minot AFB's influx of families, next increasing housing prices due to the 2011 flood and finally raising prices again due to the oil boom. / I have lived in Minot for a number of years and had to contemplate moving from the area until I was able to secure a job within an oil company to simply "pay the bills". / I suppose there are more chain restaurants in Minot, but i dont really see any real local growth or improvement to what I consider my hometown. / I have many friends and acquaintances that are making "more money" than they have even before but find themselves struggling financially month to month. / I have less concerns about the crime rate and more concerns that I have to change my career choice simply to afford the rent in a small rural town.

I wish that more money would be put into building up the rural roads and maintaining them. I am not lucky enough to drive a company vehicle and my vehicle gets beat up on a daily basis. / / I also wish more money would be allocated for law enforcement to cover rural areas. It isn't the same anymore. I live 28 miles out of town and am afraid to go for a walk because I don't know who is coming down the road. We had people from a drilling rig trespassing on our property and were afraid to press charges because they know where we live and what we drive. We have small children and didn't want them to rebel against us.

I would like to see the Blue Law rescinded, to make all goods and services available, whenever the retailer is willing to be open. / / Some goods and services are in short supply. I heard that an additional WalMart was denied in Minot, even though the one WalMart in Minot is always packed, and sometimes runs out of goods, at certain times of the week. Same with the WalMart in Williston. / / More dining establishments would be nice. Minot is getting better, but would like to see more. Would like to see the full range from fine dining to more fast foods; Texas Roadhouse, Red Lobster, Wienerschnitzl, Famous Dave's, Lucille's BBQ, More Taco Stands, More breakfast joints, etc... / / Would like to see more local events, to meet people, without having to go to a bar... / / Better information on local sporting events. I would support the High School and College Sports Teams, if it was easier to figure out. Maybe, I am just lazy, and haven't figured it out yet.

north dakota is the american dream right now if you have drive and ambition!

One of the items that is important to me is access to a major airport in order to visit family members. Because of the BOOM the cost of travel is significantly higher then other areas and this is discouraging

More indoor recreational park for children. Though i dont have kids, i feel pity to see how much kids enjoying the play section at the Dakota Square Mall but the play stuff looks old and not many.

The cost of housing is very high compared to coming from the Permian Basin in Texas.

Crime in Williston is a concern. I had a vehicle stolen at the airport after being in North Dakota only 3 months. I will travel to Williston only if absolutely necessary for my job.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Need locker rooms, shouldn't have to carry all that safety equipment home & back! Hard to get to time clock, room to small. Restrooms!!!! Dispatchers won't always let you go because of what someone did to toilet. We're grown men & should be tested with respect. A lot of people have quit and I'm starting to see why! Your teased about wearing a green hat. We're not children, people need to stop bullying people. Dispatchers should treat you better, were supposed to be a team. Bad team means bad leaders.

I intend on making North Dakota my permanent residence. I love the state and I love the people. I've been at home since I got here 3 years ago.

Overpriced housing/rent and price gouging is ridiculous here. We were lucky enough to live with family for a year before we found an overpriced house we could live with. If rent wasn't so high these people wouldn't have to live in RVs, in the winter in ND in below zero weather. Also falls in line with businesses screaming for help. if people could afford to live here they wouldn't have such a hard time finding workers.

The bakken is a great opportunity for Americans and their families to get their personal matters straight after the recession and enjoy some quality of life comforts without having to worry about \$, as long as they are willing to put forth the effort. / / Drill baby drill :)

Child care prices are a big factor in why my family may leave in the future. The cost are too high and not offor set by the good paying jobs. Not to mention, almost impossible to get into.

i love the additude of the local people the respect uyou not like people in ca

Hope and pray oil prices go up a little to keep this oil play going longer / Mbi is a good company but needs to use the good people it has before letting them go to other good companies / Thank you!

with the price of oil way down- I wonder how long it will take those who are price gouging on rent to renegotiate their leases? If the low \$ per barrel of oil continues how long will it take before we see thousands of people unemployed? why is the oil \$ made on this end of the state going to the other side? the small community I live in is in need of grant \$ from the oil surplus for new streets and yet our property taxes are going to go up to pay for it.

ND needs to consider security at a higher level.

I need a four bedroom house however my hourly rate based on 40 hours a weekmakes me eligible for 3 bedroom so last in addition I am also in the process of improving my credit score..I have two boys and two girls. this 10 year gap between the two. The oldest girl would attend college he is graduating with an associates at the age of 18 home school until college courses while in high school in Henderson Nevada.the oldest boys from the National Guard at the age of 19 when he was 18 middle child is presently hey junior high school. And motivated to live here because of the higher wages and opportunities in law enforcement. /

They NEED to do something about the price of housing/rent. It is ridiculous and greediness There is a point of too much greed, even with supply and demand. This oil boom will end like the other booms and we'll be left with too many buildings and fewer North Dakotans that really did want to live here but were forced away.

Painting lines on roads w/lots of reflective material out away from the "big city" would be a huge help. Along with bigger street signs out her in the hinter land. With the darkness out here it makes it very hard to see the roads i need which inturn gives me terrible eye strain and makes me even more tired.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Study how dubai diversified to survive and apply here reliance on only one source of growth is short sighted

Concerns for cost of living such as food, gas, entertainment and basic necessities. Prices are too high, greed is evident and property taxes need to be adjusted to assist with the high cost of buying homes that are not worth what they are being sold for. Wages for service jobs need to be increased to balance the cost of living in Williston.

The weather is harsh but that isn't such a big deal. The killer is the lack of anything to do. It seems that 10 months of the year you need to be indoors and the only indoor facility is the mall. I know this is asking for a lot but something like an indoor park would be nice. What I mean is, for example, if somehow Oak park could have an inflatable dome over it from November through January that would be nice. Minot is sure better than Detroit or L.A. or Atlanta (I've been to all of these) for raising a family, but the weather does wear on a person.

the quality of the company I work for is a huge factor. The poor equipment condition I work with is a huge factor in my satisfaction with my safety and job satisfaction.

There needs to be "rent control laws" enforced to keep people from price gouging on rent. We were paying 2400/month for a single-wide trailer; and we decided to buy a camper because, economically, it made more sense. After 2 years in a camper, we are going back to renting an apartment due to space reasons. We will still be paying 2100/month. Which is what a flat rents for in New York City or London. This isn't the best place to live, and since we are moving where the money is, people are price gouging like crazy. It's not ethically right!!!

I think something needs to be done about the price gouging not all people in the community make a lot of money or they are on a fixed income so the price gouging makes these people go without food or without heat in the winter months and I do not feel it's right for some to suffer they didn't ask for this thankyou

the cost of living here is just to high plain and simple

I have lived in North Dakota all my life, even though I have traveled and been offered work positions in other parts of the U.S. because of the reputation of N.D. work ethic. The oil industry is an outdated resource. The technology is available to replace fossil fuels with non polluting alternatives. I am not an activist but the N.D. country side has been destroyed by the thousands of wells and all the traffic. Anyone that doesn't think so has no idea what has changed in the hot spots that are producing. Take a drive it will change your view unless you have never enjoyed sitting on the side of a hill with complete solitude and no noises but nature. You can't sit outside in western N.D. and not hear traffic or oil wells pumping, unless your deaf.

I would like to relocate my wife out west. Housing is the problem, cost is outrageous. Our current home has been owned for 14 years, so our current housing is affordable.

As I stated before I have no problems with drilling for oil. My problem is how the state is seeing dollar signs at the residents expense. They really should think about addressing the spacing units, LESS pads per unit. These company should be forced to make multi-well pads. Reclamation processes are also abysmal. It seems that the majority of the oil personnel working out here are not local and have absolutely no respect for the land, most never will. I have asked some if they plan on staying here and they have said no, as soon as the economy picks up in their home state they plan on leaving. The state needs to slow down, there is plenty of oil, it will not spoil underground, and mostly slow down and think a little about what we are doing.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I have been married for 13 years living in Devils Lake ND. I am currently moving to Dickinson ND in Dec. 2014, I would like to see more affordable housing and activities focused more on family values and entertainment. I think the Rec. center in Dickinson is a great start and hopefully the city leaders keep in mind the locals and family oriented opportunities.

We need better infrastructure and local officials who want to invest the money. Our current city leaders aren't doing much. Cost of living (rent, groceries, etc.) is way too high. I am living in an older home that was poorly converted to a duplex - little or no insulation between levels and I constantly hear noise from my neighbors. I am unable to afford another place, so I have to stay where I am at.

As everyone who lives in this area is aware the rent is absolutely overly expensive. It would be nice if this was address some how by either building more apartment buildings or putting a cap (that is affordable for people, even those who do not work in oil). Another issue that needs to be address is daycare. Daycare is very expensive and can take up to half of a person's paycheck. It would be nice to have a large or even huge daycare center built in the larger communities and also put a cap on that. I know people who are in their 30's and have to live at home because they can't afford to live on their own and several even have children and also have daycare expenses.

Greatly appreciate you taking this survey!

It would be nice if the people moving here would take pride in our state. The pollution and crime are ruining our beautiful state.

The only thing that keeps me from intending to stay in North Dakota permanently is the current cost of living and housing costs . Aside from those two issues, I love it here.

In the 8 years we've been here things have gone from normal and sane to out of control. Overburdened and understaffed school system, out of control price increases, outrageous housing prices, price gouging, deadly traffic. The big challenge used to be just the weather and remoteness. Now it's all the other which has brought unprecedented opportunity but not without a price. I'd rather be somewhere else.

The housing market is not easily affordable on my current salary, and I feel that I make decent money for what I am doing. It is rather frustrating being a life long resident of Dickinson and not being able to live in my own home because I can't afford to. Thank god I have family here or I honestly don't know how I would make ends meet. I currently work a full time job during the week, and I have a filler job on the weekends. I am working 45 hours a week and about 10-15 on the weekends.

My biggest problem with the state of ND is daycare costs and availability. I can't afford to grow my family due to daycare issues and that will probably be the reason my family leaves the state. I can't wait forever to have a family and the state doesn't seem to be concerned about keeping families here long term.

Roads are a major concern in Western ND. They were not built for what is going on now - something must be done quicker to change the traffic problem. The greed with rent/groceries etc - both of my children moved from Western ND because they could not afford to live here. This has to change!!!! We are moving out of Western ND within the next 1-2 years - totally unorganized/chaotic mess.

I love it here, but the cost of living and lack of a few services deemed necessary are quite high in the Bakken.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

The excessive community greed the entire western 1/3 of North Dakota has experienced will hopefully catch those who have committed to it the worst with their pants down in a massive end to the boom, thus driving them into bankruptcy--hopefully first before everyone else.

Build more places that accept pets and that are affordable.

I am originally from ND and almost all my family is here. I am engaged and my fiance is from ND as well with all of her family here. All of our kids are graduated from HS and on their own

I see North Dakota experiencing growing pains in which a shortage of certain goods and services creates opportunities for price inflation. Buying a modular home here for example is more expensive than a stick-built home in Alaska, so it doesn't make good business sense to relocate to an area to pay more for lower quality. I do enjoy the conservative political atmosphere, the amenability of the the locals, and the work ethic of people who come here to make a living. Reducing the cost of living would attract many more permanent residents. I also see an exploding crime rate with the influx of undesirables looking to take advantage of honest folk, so an increased law enforcement presence would be desirable as well.

I am from Montana and love the recreational side of montana with hunting and fishing.

Wages aren't always higher in the Bakken for office workers.

What I see. The good paying jobs brings people here. The high cost of living drives them away. / Possibly a tax break to offset the living expenses would help.

I believe if Housing was more affordable when people come to ND to work would stay and work in ND but its truly hard to maintain 2 households on any amount of money the individual makes

I've lived here for 30 plus years, and I think this boom has shown just how greedy property owners are. / Raising rents of the elderly that are on a fixed income is appalling! If they were making money at \$600.00 a month, it is sickening that they are asking 1400 to 2400 a month for the same, rundown, underdeveloped apartment that smells like mold! I am glad I have my own home and had it before the raping of people started. I am afraid that if I had to rent a place in Dickinson, ND, I would move because of the greediness of the Rental Business and the over-inflated prices of everything from groceries to rentals to trying to buy a home. It just makes me sick. I am dissapointed in Dickinson. I have lived here and was very pleased with the friendliness and fairness that I was treated with. But I feel for the individual or family that is struggling to stay afloat here now.

Housing and day care are in huge demand.

I hate what the energy has done to the life style of ND. It has changed forever, housing costs are crazy and not right.

The Bakken is an employment opportunity like nothing I can find elsewhere. I'm from Michigan, one if the poorest states there is. I left a \$12.75 job back home and am already up to \$18 an hour while about to jump to \$24. To be honest I'm willing to make all kinds of sacrifices to work out here because it's basically a fast forward button to success. The fact that I'm 22, no college degree, and will be making 100k within the next year... You can't find that anywhere else.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I don't mind living in Stanley, but would rather live and work in Minot. There are a few restaurants here, but the movie theater is only open 3 nites a week, and they never coincide with my nite off. / The cost of housing here is awful. Mine is affordable, but I live with two other guys in a small, two-bedroom apt. and share a bedroom. / I usually drive to Minot on my day off to shop for the items I left when I moved. Try to eat while there. / My biggest problem is the number of hours I have to work and the shifting schedule. As a truck driver, I regularly get stuck on the side of a road (worst-case), at a frac site or nearby truck stop when I run out of allowable driving hours. This is an employer-created problem, primarily, but will be why I change jobs here or leave the area for less money but better schedule back on east coast.

My thought in a nut shell , is I don't really think the community s in N . D. Want more people to more there family's to the state . The price for a home is to high compared to other places , MT, SD , WA . But I'am still looking .

Beach community has been great to live in, the people are very welcoming. Winter road conditions could be better through out North Dakota. At least sand on intersections would improve safety considerably.

We need housing to come down. We have so many workers that want to bring there families to WC but can't afford the housing. It is so sad!

We're still debating getting a residency here. The jobs are here, and for the time we'll be here a while.

Crime in the Williston area is a big problem. I had my truck stolen at the Williston airport after being in North Dakota only 3 months.

My experience so far has been good. The rent might be a little high, but it is what it is. In the town I am in, mist of the locals are very nice and I am enjoying getting to know some of them.

your question about living in a bigger community and driving further or smaller and driving less. i'm happy right where i'm at and that was not one of the options. it would not let me continue the survey till I punched one of the two answers. that is not the answer I would have punched.

The wheat-covered lands of North Dakota is astonishing to the eyes. A "whiteout" is just that; a land that is white-only without a hint of other colors. This is the type of place in which an individual has an opportunity to succeed, but not just succeed; she or he can thrive in these wheat- and whiteout-covered lands. Now, this is based on a conditional statement: / / If I can succeed, then moving to North Dakota is worth the move. / If moving to North Dakota is worth the move, then I will move to North Dakota. / Therefore, I will succeed by moving to North Dakota. / / Yes, it is a simplistic argument, but this is the way most people think when they see high paying jobs: / "I can make a lot of money, buy cars, a house, and other products to become happy." / / Once they get here, they realize several things about succeeding after moving to North Dakota: "Everything is a lot pricier than I anticipated." The housing is not affordable unless you have roommates. Saving money takes time, and it is done in small increments. Activities are not plentiful. Culture is lacking in the community. This is a community of workers; it is not a community of engaged citizens. Thus, everything is a lot pricier than anticipated. / / North Dakota is, at the very least, offering the opportunity for success. Build affordable housing (remember that not everyone is a truck driver for an oil company) to allow people to move here with family members. Grow and add diversity, but not at the expense of outdoor activities. Any other questions? Feel free to somehow get in contact. I am not opposed to offering an opinion based on fact rather than feelings.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Vehicle traffic is terrible for such a small town. Entertainment and shopping opportunities are very limited in the area. Three hours to and from Bismark, ND, to eat and shop is not convenient. The property that I am renting currently is conveniently located, but has no laundry services (hook-ups in the apartment), and the rent is twice what I paid in Colorado Springs, CO, where I had laundry in the apartment, pool, and gym on the property. The apartment is older, and not very heat/cool efficient.

Housing too expensive / Cost of living twice of that of where I come from / Lack of Public services at night when the roads are covered in snow ie; snow plows and Police

All the new law enforcement really make a bad impression on this state, if you get pulled over, they approach your vehicle like this is the Wild West. Looking for a gun battle. I think on board cameras in the squad cars may settle some of this over ambition for the job. Most of us all want to make a good living and go home to our families, not be bullied by people on a power trip.

Although rent is very high, I love living in Minot. I enjoy all the young people and the abundant opportunities. I can witness the community prosper and expand before my eyes and love being a part of it.

Some stop lights to get off the interstate would be handy

Cost of housing, either for purchase or rent is the most significant barrier in my moving my family here and making North Dakota a permanent thing. Even renting a 2 BR apartment is outrageous. It seems oil & gas workers are taken advantage of because everyone feels they make tons of money. Wages may be higher, but most workers still have families to support and all their bills "back home" and then have to support themselves while working here. If housing were more affordable, i believe more people would move their families here. This industry is sustainable and long term solutions are needed.

I would like to see more opportunities in the western side of North Dakota such as restaurants and housing and the prices in the stores are astronomical would like to see that get under control

My family is very happy here. / We only wish to be able to have more convenient location and affordable air travel from Minot to Jacksonville fl.

I like ND, but I cannot stand everyone trying to make a profit off the workers' backs. Gas is \$2.559/gallon back home, but still \$3.199 here. A tin of Folgers for \$22? That's insane! If I could find reasonable housing within a decent commuting distance from work, I would relocate my family to the Bakken. Until that happens, the current plan is to make as much money as I can until 2020 and get the hell out of here.

I came out to ND in 2011 and my family and I have found ND much to our liking. The hours were long when I first started in the field but have dropped down to a normal level in the last year or so. / /

Housing is really expensive. I can live with how everything else is.

I feel like I live here I'm here 2/3 of the year more than I'm home I think a lot of the workers don't have respect for the local community's and all of us that live in other states should pay a yearly work permit through all employers so the money could help take the burden off of the locals and help pay for the services we all use.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

I feel that with the constant changing in North Dakota that greed has blinded a lot of local people into gouging hard working with family's and it is not affordable for family's and a lot of very shady people are moving in cause they are the only ones who can afford the prices and it is going to destroy this community crime is on the rise at a alarming rate and it is beginning to become very unfriendly to family's and children ! The city infrastructure is a joke we had out first snow storm an no school for two days and when I go to take my kids to school the city hasn't even plowed infront of the school or even sanded the roads ! I was appalled as I watched kids slipping and falling in cross walks what a dangerous situation all because of poor planning and laziness ! There needs to be some changes it's time to step up to the plate ! Even companies like Mbi are starting to make good hard working employees feel not valued and this is discouraging

I live in Mandan and have for my entire life. For 3 months had to commute to Belfield for work. Stay Monday through Friday in Dickinson at a hotel. Accommodations there were very nice but very glad when my employer opened an office in Bismarck. Would not want to live in western nd due to the influx in population . Safety and cost of living way too high but yet those things are slowly moving into the bis Mandan area. Hopefully we are better equipped to handle

Affordable housing and continued infrastructure improvements are the highest priority items /

Love ND

I've been in sales, hauled production water and have been in dispatch for the past 2 years. It's by far the most challenging of all the jobs but it pays well and is steady and I can do it in an office. I would like to make about \$10k more a year because my family lives in Bismarck and I have to rent an apartment out in Medora for my days on so the extra money would help to bridge the gap. Ideally I would like to get a job in Bismarck to be home with my wife and kids every night but I can't find anything that pays as good as the job I have. Everyone out here is away from their families to make money and have a better life but with that comes sacrifices such as being away from your family for extended periods of time, paying for two households, and working long hard hours in challenging jobs.

I came to Work in North Dakota to gain working capital to build my charcoal business. which it has been very good at doing, The oil market has already crashed but the effects will not be felt for a few months to a year.

Since the elements are so harsh an indoor park would be nice. Something like Oak park but indoors. Hey, its the 21st century, we can land a dishwasher on a meteor why not an indoor park!?

I'm a single dad and father of 4

Housing costs are the detereriant that keeps people and families from moving and staying

Moved home after 35 years, grew up in New Salem.

My family and I like it here and are happy to be part of of this community. Your all doing the best you can. It's real busy here.

I like North Dakota a lot, but consider Missoula home. I love my current position and one week on and one week off is a perfect fit for me traveling home.

Housing is the number one priority. We could use a better cinema also.

It would be a lot better if the housing was more affordable.

It is nice being close to everything but would prefer to eventually rent outside of city limits.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

Lived here less than two weeks a little hard to answer questions correctly

Everything I have seen or payed for is too expensive. Housing is by far over valued. \$3500 rent for a 4 bedroom is unacceptable. That price is criminal. I & my family live check to check. My family requires medical services & special school needs that are not offerd in the Stanley, ND area. I have met many local people that are rude. Customer service is very much lacking. I prefer service with a smile. Not the look of condemnation. I don't want my children growing up in a place where they are treated badly just because they weren't born here. If I didn't care about how my family lives I would have stayed in Minnesota.

This area really needs more access to organic, gluten free, preservative free foods and restaurants. This area also really needs more activities for young adults besides bars and bowling. Cultural activities and non-drinking events would be a plus.

Housing is too expensive / Housing is too expensive / Housing is too expensive / Takes long time to render some services such as car repair

I wish mbi would make Beulah oil permanently so I and others could make it a home mr Steffan

Lawless vehicle activity is the most dangerous activity in Central Mckenzie County. Male Female imbalance encourages instinctual tension and hinders community building.

Would be happier in the small community if it had nicer apartments and a grocery store.

Housing is the biggest issue in the Bakken. My company (Mbi) charges up to 900.00 for rent where it is expected to share a room. That's a complete rip off. Especially where you can't have privacy. The other issue is each apartment has 4 people. So 3600.00 a month for an apartment isn't going to work. The apartments are minimally maintained. If wanted people to move here we need to offer incentives. Like down payments or a monthly subsidy to allow the expenses to be more in line with everywhere else. / Also it seems that locals have grown mad about the influx of workers. So very few are welcoming the workers

ND is our new home we love living here.

MBI treats me and my family very well , it's the place to retire from.

North Dakota is a state you come to to make money. There are no attractions here other than work. There is no way I could make this type of money back home based on the level of taxes the government puts on young businesses today which reduces the free market

Housing cost are way to high and waiting for daughter to graduate high school before making finally making our minds up about moving

Infrastructure updates...

More recreation opportunities, places to see, eat and things to do would keep me here much longer.

Being born and raised here I am extremly dissappointed in the greed of the business owners of this state.

I did not come here initially to work in the energy industry, but I fell into an energy industry job inadvertently. I love my job, I love my community, I love North Dakota. Even though I am not originally from here, I am proud to call Minot home and I intend to stay here long term. It's been a great 7 years and I'm looking forward to more.

Appendix Table A-8 (cont.). Responses to Do you Have any Additional Comments, Workforce Survey, 2015¹

With all the money coming into this region, it is a shame our quality of life is so poor. Infrastructure needs serious upgrades to keep up with the growth, and there are very limited options for entertainment and recreation. Ideally we could get federal grants to assist with upgrades to our infrastructure (roadways, utilities) and raise taxes to fund local improvements (parks & rec, schools, etc.)

I am a life time resident of North Dakota and have lived in Minot most of the time. I am concerned with the rising crime rate and the increase in traffic but I am mostly concerned with the cost of living for this area. I am fortunate to have one of those "oil money" jobs so I am not affected as greatly as those who are working in jobs that pay minimum wage or slightly higher wages. The apartment building I live in charged around \$900 a month for a two bedroom apartment (back in 2011) - that same apartment now rents for \$1500 - \$1800 a month depending on square footage. To accomodate the increase in rent, most of the apartments now have several occupants which causes a congestion in the parking lot and laundry facilities.

Hope this helps....Have a great Day

I am pleased with the progress that Dickinson has made in the 3+ years I have been working here. For the future, I would like to see rental prices come down. In my opinion, there are enough apartments in town to accomodate the inflation in population. It is pretty obvious that property management companies are intentionally keeping the rent at outrageous prices. Traffic is the biggest problem that needs to be addressed in the Williston Basin. Highway 85 between Belfield and Williston is dangerous. The new bypass around Watford City and Alexander is going to help things, but I believe Hwy 85 should be made in to a 4 Lane Road.

What Dickinson needs is the infrastructure that should exist in any town. Opportunities to shop, find entertainment, and recreation. However, this will be very difficult to provide until the housing and cost of living are brought under control so that people employed in those areas can afford to work and live here.

As we move into winter, Minot really needs more outlets for children recreation. The mall has a tiny play area which is packed on the weekends. The Y doesn't have anything for toddlers/small children. Cities like West Fargo have in-door bounce castles available through the park district. I wish Minot could organize something like this at the State Fair Center or somewhere in town to get families out of the house during our long winters.

My husband and I are living our dream life, and are so thankful for North Dakota. We both have great jobs with great pay, and by working hard and taking the plunge have been successful. Housing has been the most difficult aspect of our relocation. We did not take no for an answer when getting a bank loan, and refused to pay the outrages rental prices. It can be done, but compromise and consistency were a must.

I don't work or live in the Williston Basin. I live and work in Grand Forks. The company I work for is a crude oil pipeline operator whose main office is in Minot.

If only you could make the winters in ND a milder!! I have lived in ND since 9 years old and that is the only draw back of the state.

I would like to see more emphasis/press on the "good" things ND has to offer. The school systems, including colleges, available monies available to graduating high school seniors, etc. I think that info would promote more families to consider ND.

¹Responses are reported verbatim.

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